DOCUMENT RESUME

ED 216 273 CG 015 887

AUTHOR Haggstrom, Gus W.; And Others
TITLE Teenage Parents: Their Ambitions and Attainments.
INSTITUTION Rand Corp., Santa Monica, Calif.
SPONS AGENCY National Inst. of Child Health and Human Development (NIH), Bethesda, Md.
REPORT NO ISBN-0-8330-0331-3; RAND-R-2771-NICHD
PUB DATE Jul 81
CONTRACT NICHD-N01-HD-72819
NOTE 248p.
AVAILABLE FROM The Rand Corporation, 1700 Main Street, Santa Monica, CA 90406 ($10.00).

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS Academic Persistence; Adolescent Development; *Adolescents; *Attitudes; Career Development; *Family Influence; *Family Planning; Homemakers; *Marriage; Postsecondary Education; *Young Adults
IDENTIFIERS *Adolescent Parents

ABSTRACT

This report, which presents the results of a study of the effect on young people's lives by early family formation and especially entry into parenthood, is based on the National Longitudinal Study of the High School Class of 1972, a large national survey that has tracked over 22,000 young people who are now in their mid-twenties. Following a discussion of methodology and data, the report examines the effects of early family formation on postsecondary education, career development, women's orientation toward homemaking, dependency on parents and society, economic characteristics, fertility, and attitudes. By distinguishing between early parenthood and early marriage without children, this report reveals that many of the effects that might be attributed to early parenthood also show up as effects among the nonparents who married at approximately the same time. Although the materials stress that the data apply to parenthood in the late, rather than early, teens, the report challenges the notion that early parenthood, by itself, has a destructive impact on the ambitions and attainments of teenagers, and concludes that teenage parenthood should be regarded as only one aspect of a broader process of early family formation. The six appendices provide definitions of variables, a model for estimating effects, background factors, regression index and sex role attitude measures as well as a bibliography. (NRB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED2162273

HARD COPY NOT AVAILABLE

R-2771-NICHD

Teenage Parents: Their Ambitions and Attainments

Gus W. Haggstrom, Thomas J. Blaschke,
David E. Kanouse, William Lisowski,
and Peter A. Morrison

July 1981

Prepared for the National Institute
of Child Health and Human Development,
National Institutes of Health

CG 015887

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☒ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

T. Cockell

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Rand
SANTA MONICA, CA. 90406

This project was supported by Contract No. N01-HD-72819, awarded by the National Institute of Child Health and Human Development.

Library of Congress Cataloging in Publication Data
Main entry under title:

Teenage parents.

"R-2771-NICHD."
Bibliography: p.
1. Adolescent parents--United States--Longitudinal studies. 2. Teen-age marriage--United States--Longitudinal studies. 3. High school students' socio-economic status--United States--Longitudinal studies. I. Haggstrom, Gus W. II. Rand Corporation. III. National Institute of Child Health and Human Development (U.S.)
HQ759.64.T43 306.8'088055 81-10604
ISBN 0-8330-0331-3 AACR2

The Rand Publications Series: The Report is the principal publication documenting and transmitting Rand's major research findings and final research results. The Rand Note reports other outputs of sponsored research for general distribution. Publications of The Rand Corporation do not necessarily reflect the opinions or policies of the sponsors of Rand research.

Copyright © 1981 The Rand Corporation

Published by The Rand Corporation

PREFACE

This report presents the results of a study of how young people's lives are affected by early family formation, and especially entry into parenthood. It is based on the National Longitudinal Study of the High School Class of 1972, a large national survey that has tracked over 22,000 young people who are now in their mid-twenties. The research was supported by Contract No. N01-HD-72819, awarded by the National Institute of Child Health and Human Development (NICHD), U.S. Department of Health, Education, and Welfare.

The findings and their policy implications are intended for a broad audience, including government policymakers, the research community, high school counselors, and parents.

Portions of this research have been presented previously at meetings of the Population Association of America, the American Association for the Advancement of Science, and several NICHD contractors' workshops. Other Rand publications based on this project are:

Gus W. Haggstrom and Peter A. Morrison, *Investigating Adolescent Parenthood with the National Longitudinal Study of High School Seniors*, P-6272, February 1979.

Thomas J. Blaschke, Gus W. Haggstrom, and Peter A. Morrison, *Procedures for Estimating Parenthood and Marital Status for Respondents to the National Longitudinal Study of the High School Class of 1972*, N-1275-NICHD, August 1979.

Gus W. Haggstrom and Peter A. Morrison, *Consequences of Parenthood in Late Adolescence: Findings from the National Longitudinal Study of High School Seniors*, N-1343-NICHD, December 1979.

Another Rand study uses the same data base to examine how young people's aspirations, attitudes, and self-conceptions are affected by their postsecondary experiences:

David E. Kanouse, Gus W. Haggstrom, Thomas J. Blaschke, James P. Kahan, William Lisowski, and Peter A. Morrison, *Effects of Postsecondary Experiences on Aspirations, Attitudes, and Self-Conceptions*, R-2616-HEW, April 1980.

SUMMARY

This study was undertaken to determine how early family formation affects the educational, vocational, and personal development of teenagers. The research is based on the National Longitudinal Study of the High School Class of 1972 (hereafter, NLS), a large panel study of over 22,000 high school seniors who were the subject of follow-up surveys in 1973, 1974, and 1976. The report treats the effects of early family formation on postsecondary education, career development, women's orientation toward homemaking, dependency on parents and society, economic characteristics, fertility, and attitudes.

For most members of the Class of 1972 who became parents while still teenagers, the complications of pregnancy and childbearing occurred shortly after high school graduation—a time when most teenagers' lives are in a state of flux as they adjust to living away from their parents and coping with the demands of their jobs, college attendance, or military service. In carrying out this research, one of our main concerns was to distinguish the effects of parenthood from the effects of the numerous other factors that shape young people's lives during this turbulent formative period between adolescence and adulthood.

Our study depends heavily on the longitudinal nature of the NLS and the richness of its background information. For many of our outcome measures, such as expected educational attainment and career aspirations, the initial measurements were taken when the NLS participants were still seniors, thereby providing "prescores" that predate the start of family formation for most members of the class. The NLS also provides comprehensive background information, including measures of academic aptitude, scholastic performance, socioeconomic status, race, and religion. Our examination of these measures reveals that soon-to-be parents in the Class of 1972 differed from their peers in many important respects. For the most part, they ranked low among their classmates in academic aptitude, scholastic performance, and socioeconomic status. Few of them planned to enter college, and fewer of them actually did so.

Our study distinguishes the consequences of early parenthood from those associated with early marriage. Among teenage parents, the marriage date is often closely linked to the date of pregnancy, making it difficult to ascertain whether observed changes over time are due to parenthood or to other factors associated with marriage. The NLS, with comprehensive data on large numbers of married parents, married nonparents, and single parents, permits us to examine the consequences of marriage and parenthood separately. We use an "individual effects" model to estimate the effects of early family formation upon educational patterns, career progress, changes in long-term aspirations, and changes in attitudes. The model embodies two premises: (1) The effects of

marriage and parenthood vary from individual to individual in an unpatterned way depending on numerous factors; and (2) these effects can be estimated for a particular individual by comparing changes over time in his or her outcome measures with estimates of the expected changes for people with similar characteristics in a suitably chosen "control group."

Two main themes emerge from this analysis. First, the direct consequences of teenage parenthood on young people's ambitions and attainments are not as severe as one might surmise from raw comparisons of outcomes between parents and nonparents. Our analysis indicates that the preexisting differences between the groups would have led to very different outcomes even in the absence of parenthood.

A second major theme relates to separately identifiable effects of parenthood and marriage among teenagers. In comparing the members of the Class of 1972 who married and became parents while teenagers with those who married but remained childless, we find that many of the effects that might be attributed to early parenthood also show up as effects among the nonparents who married at about the same time.

This is not to say that the study reveals no adverse consequences associated with teenage parenthood. To the contrary, we find a number of important effects. Married women display a clear shift in career aspirations and attitudes when they become mothers, and both their educational attainments and educational aspirations suffer. Although a sizable proportion of young mothers try to pursue dual roles as homemakers and employees, they have considerably lower wage rates than nonmothers, indicating that they operate under a severe handicap in the labor market. The single mothers clearly depend on their families and society for financial support much more heavily than do other women.

We also examine the effects of early parenthood on men, and find that teenage fathers lag behind the other men in both educational attainment and educational aspirations, and they are less satisfied with their career progress. In general, however, the average effects of parenthood for men are barely distinguishable from those of early marriage.

The fact that the NLS data are restricted to a cohort of high school graduates in the early 1970s imposes several qualifications on our findings. Because the NLS excludes high school dropouts, our findings cannot be generalized to all teenagers. Also, the consequences that we report are necessarily restricted to the near term. Longer-term effects, although possibly foreshadowed by some of our measures, will not be fully apparent until later in the respondents' lives.

Finally, our results apply to parenthood in the late teens and not to early adolescence. We have no doubt that the consequences of parenthood are more severe and long-lasting for younger teenage parents who drop out of school long before graduation. For people dealing with the "problem" of adolescent parenthood, this study offers hope in that it suggests that, if parenthood can be postponed until the late teens and if dropping out of high school can be prevented, teenage parenthood may have far less severe consequences.

In any case, the study calls into question the prevalent notion that early

parenthood, by itself, has a destructive impact on the ambitions and attainments of teenagers. While the consequences of early parenthood are undoubtedly severe and long-lasting for some teenagers, most differences in outcomes between parents and nonparents that are examined in this study appear to stem from preexisting differences. We also found that married teenagers who defer parenthood for several years incur many of the same "consequences" as those who become parents early—a further indication that parenthood per se is not to blame. In sum, teenage parenthood should be regarded as but one aspect of a broader process of early family formation, a process whose consequences do not depend entirely upon reproduction.

ACKNOWLEDGMENTS

The authors gratefully acknowledge their indebtedness to several people who have contributed to this effort: Stephen J. Carroll, Winston Chow, Will Harriss, Arleen Leibowitz, Dan Relles, and Linda Waite of Rand; John Cogan of Stanford University; Kristin A. Moore of The Urban Institute; and Ronald R. Rindfuss of the University of North Carolina at Chapel Hill.

CONTENTS

PREFACE iii

SUMMARY v

ACKNOWLEDGMENTS ix

Section

I. INTRODUCTION 1

II. EARLY ENTRY INTO PARENTHOOD: MAJOR PATHWAYS OF INFLUENCE 3

III. DATA AND METHODOLOGY 9

IV. A PROFILE OF EARLY FAMILY FORMATION FOR THE CLASS OF 1972 25

V. PLANS AND REALIZATIONS 41

VI. EDUCATIONAL ATTAINMENT AND ASPIRATIONS 56

VII. CAREER DEVELOPMENT 75

VIII. ECONOMIC CHARACTERISTICS 101

IX. DEPENDENCE ON PARENTS AND SOCIETY 118

X. FERTILITY 125

XI. ATTITUDES 135

XII. CONCLUSIONS 177

Appendix

A. Definitions of Derived Variables 179

B. A Model for Estimating the Individual Effects of Early Family Formation from Longitudinal Data 185

C. Means of Background Factors by Marital and Parenthood Status 195

D. Regression Equations for Calculating Adjusted Means 200

E. Development of the Career Aspiration Index 229

F. Development of the Sex Role Attitude Measures 232

BIBLIOGRAPHY 235

I. INTRODUCTION

Teenagers accounted for approximately 17 percent of all U.S. births between 1970 and 1977. Although the rising incidence of parenthood in the earlier years of adolescence has received considerable attention, the 18- and 19-year-olds account for over three-fifths of the births to teenagers. The rate of childbearing in these later years of adolescence is on the decline, paralleling the trend among adults. Still, it is in their late teens that adolescents are most likely to become involved with parenthood. Each year, about 8 percent of women aged 18 to 19 bear children; for most, the event is an all-too-abrupt transition to adulthood (Baldwin, 1976, 1981).

Adolescence is itself a period of rapid transition and change, of course, and the circumstances that surround parenthood during this stage in life vary widely according to the individual's age and maturity. Entry into parenthood is, nonetheless, a critical life event at any point during adolescence, and certain common features are noteworthy:

- Typically, pregnancy during adolescence occurs premaritally and is unintended.
- Pregnancy confronts the prospective parents with unexpected, and typically unwelcome, choices that carry profound long-term implications: whether to terminate the pregnancy, or to resolve it hastily through marriage, or to bear the child outside of marriage. Adolescents are not usually well equipped to make such choices in a fully informed way.
- The decisions associated with sexual involvement and pregnancies are interconnected and often sequential, encompassing a complex array of contingencies. Young people whose lifetimes have been affected by the prospect of early parenthood may unwittingly foreclose later options concerning education, employment, and family formation.

It has been estimated that there would be about 40 percent fewer premarital pregnancies if all teenagers who did not intend to give birth practiced contraception consistently (Zelnik and Kantner, 1978). Adolescents lack consistent patterns of contraceptive practice, however, and rely less on dependable methods; many adolescents do not believe that they are at risk of pregnancy; and there are personal and intracouple barriers to contraceptive use and contraceptive services. Although research has helped to point the way toward more effective prevention of unintended childbearing, such intervention has raised conflicting and largely unresolved moral issues within American society: What kind of intervention? By whom? In whose interests? However these issues may be resolved, it is apparent that adolescent parenthood is a matter of public concern; and because it is unlikely to disappear in the foreseeable future, its

aftermath is necessarily a matter of public concern. Parenthood will continue to impinge on young people's lives, restricting their options and affecting their goals and attitudes. It also will require public intervention with costly social services and, insofar as it weakens the family as a socializing agent, may pose long-term threats to society that may not become apparent for some time.

How does parenthood affect young people's lives? What are the specific consequences, and how intense are their effects? Answers to these questions are a prerequisite for informed individual choice and for effective policymaking. Adolescents who face critical choices compelled by parenthood can benefit from a fuller understanding of how those choices may affect their adult lives. Policymakers concerned with the adverse consequences of parenthood require precise information to identify the effective intervention points and target groups that would benefit the most from specific programs.

The above questions can be clearly posed, but they lack clear answers. Parenthood (and, hence, its effects) is closely intertwined with marriage, making it difficult—and perhaps even inappropriate—to distinguish the separate effects of these separate family-formation processes. If last year's college-bound girl marries, bears a child, and becomes this year's full-time homemaker, should we regard her dropping out of college as a consequence of marriage, parenthood, or both? Should we regard the effect as a permanent end to her education or only a temporary (and less costly) interruption? Had she not borne a child, might she have married and ended up a homemaker just the same?

As these hypothetical questions demonstrate, the differences we observe between parents and nonparents—e.g., parents' more frequent curtailment of education—may not be accurate indicators of parenthood's consequences. Involvement with parenthood and family formation in general may be more common among young people with relatively low educational aspirations. Indeed, it may provide some of those who wish to leave school with an excuse for doing so. Accordingly, it would be incorrect to infer a causal relationship between entry into parenthood and curtailment of education simply because the two are associated.

The present research has a specific focus on parenthood in *late* adolescence (approximately 18 to 19 years of age). It seeks to answer the question: How does entry into parenthood affect individuals during the transitional period that spans the late teens and early twenties? The effects we examine are measured with reference to numerous specific outcome variables described ahead—for example, measures of self-esteem, educational and career aspirations, and economic well-being.

Our research is based on the National Longitudinal Study of the High School Class of 1972, a large panel study of over 22,000 high school seniors who were the subjects of follow-up surveys in 1973, 1974, and 1976. The NLS participants are now in their mid-twenties and have begun to experience many of the consequences of early family formation.

II. EARLY ENTRY INTO PARENTHOOD: MAJOR PATHWAYS OF INFLUENCE

Entry into parenthood in adolescence is an abrupt transition to an adult role. It may create formidable barriers to further achievement, prolong economic dependency, stifle aspiration, and deflect young people from their life goals. By disrupting the normal processes of achievement that lead to adult self-sufficiency and the realization of life plans, parenthood jeopardizes young people's life prospects. A rapidly expanding body of previous research has examined its consequences. Although this evidence must be interpreted cautiously, it furnishes important insights relevant to the findings we report ahead. Accordingly, this section provides an overview of the principal pathways through which these consequences occur, as a prelude to the rest of our report.

Most studies (our own included) carry inherent limitations that restrict interpretation. In many cases, the data analyzed do not refer to contemporary adolescents, but to contemporary adults who became adolescent parents a number of years ago in a different social atmosphere. The norms that prevailed then regarding pregnancy and parenthood outside marriage, and the lower reliability of contraception, may have affected outcomes differently from the way they do now. Such studies therefore may be misleading if relied on blindly as a guide to the future outcomes of contemporary adolescent parenthood.

Many studies, moreover, focus exclusively on adolescent *parents* and do not include nonparents. Consequently, they cannot distinguish the effects of adolescent parenthood from the effects of adolescence itself, because they do not compare the two groups. Where such comparisons are possible, the data often lack sufficient background information on preexisting socioeconomic and attitudinal differences between individuals who subsequently became parents and those who did not. Without such information, interpretations necessarily remain tentative, since parenthood may be only spuriously related to the effect in question.

INTERFERENCE WITH ACHIEVEMENT

Truncation of Further Education

Postsecondary education is a principal pathway to career attainment and financial independence that teenage parenthood can interfere with in several ways. One is by prompting the pregnant woman to drop out of school. Some women who aspire to more education simply postpone further schooling. Others lower their long-term aspirations.

Previous research has documented a strong association between early entry into parenthood and truncation of educational attainment. Age at first birth is a critical factor. The earlier an adolescent becomes a parent, the fewer years of schooling he or she is likely to attain thereafter.

The conventional wisdom posits that parenthood creates barriers to further schooling and stifles aspiration. In fact, the research findings here are not amenable to such straightforward interpretations. A major problem is the difficulty in establishing unambiguously the causal connections and temporal sequence of events.

To illustrate, an early pregnancy may curtail formal schooling for a woman with high career aspirations; for another woman, pregnancy may precipitate dropping out, but the real reasons are low ability or dissatisfaction with school. In either case, an association would be apparent in the data, but only for the first woman would it be correct to infer a causal relationship between pregnancy and curtailment of education.

Where there is a causal relationship, another uncertainty arises. How much of the deficit in educational attainment will prove to be permanent? This question can be resolved only through long-term follow-ups to determine how much of an initial educational deficit eventually is made up in adulthood. Currently, however, studies that entail long-term follow-ups necessarily refer to people who became adolescent parents many years ago under distinctly different socio-cultural circumstances. The extent to which the conclusions of such studies apply to contemporary circumstances is open to question.

Viewed with these caveats in mind, the findings from other studies are summarized below.

Dropping Out of School. Pregnancy and motherhood have been among the primary reasons for dropping out of school. Data from Bacon (1974), for example, reveal a strong negative association between high school graduation rates and age at first birth. More than four-fifths of those who became mothers prior to age 18 failed to finish high school.[1] Not only does the onset of childbearing responsibilities restrict other role activities, but also women who became pregnant while in high school were until recently forced by school policy to leave (Kipp and Griggs, 1975; Ewer and Gibbs, 1976). In July 1975, when Title IX of the Educational Amendments of 1972 took effect, the official obstacles to remaining in school were removed. A school receiving federal funds is prohibited from expelling students simply because they are pregnant. Even so, opportunities for school-age parents vary enormously throughout the country. Even when young mothers are not prevented from attending classes, the difficulty of child care, household tasks, financial support while attending school, and social pressures to spend time with the child decrease the likelihood of continued school attendance. Still, the fact that many young mothers resume school after delivery indicates that teenage parenthood per se is not an insurmountable barrier to educational achievement (Furstenberg, 1976).

[1]Bacon's analysis is based on a national probability sample of ever-married mothers for whom parenthood occurred prior to 1967. Corroboration is found in Trussell, 1976; Furstenberg, 1976b; Presser, 1977; Huber, 1970; Coombs and Cooley, 1968.

Continuing Barriers to Further Schooling. Public efforts may assist a girl through the difficulties of staying in school during pregnancy, but parenthood imposes responsibilities that may continue to disrupt the educational process. Evidence of this disruption is apparent in the following points:

- The teenage mother completes fewer years of schooling than her nonparent peers (Waite and Moore, 1978; Moore and Hofferth, 1978). The estimated size of this deficit varies from study to study, reflecting different poulations examined and background variables controlled; such estimates also are sensitive to *when* in adulthood educational attainment is measured. There are indications, however, that educational attainment and early childbearing are linked in different ways for different segments of the adolescent population (Trussell, 1976). Among some, pregnancy appears to induce dropping out of school; among others, the factors that foreshadow less schooling (or result from less schooling) are conducive to adolescent pregnancy.
- The younger the mother at first birth, the fewer years of schooling are completed (Bacon, 1974; Trussell, 1976; Waite and Moore, 1978). According to one study, young women who become mothers at age 15 or younger complete about 1.4 fewer years of schooling by age 24 than do their peers who delay motherhood until ages 16 or 17, and 1.9 years less than those who wait until 18 to bear their first child (Waite and Moore, 1978).
- Adolescent childbearing appears to have a greater impact on the subsequent lives of teenagers with high academic abilities than it does on their less able classmates.
- The educational deficit associated with an early first birth is less for young black women than for their white counterparts (Card, 1977; Waite and Moore, 1978). The latter study, for example, estimates that a first birth at age 15 or younger results in twice the educational deficit for young white women than it does for young black women: 3.1 years versus 1.4 years of schooling by age 24.[2]

Overall, these results underscore the timing of fertility as a critical influence on female educational attainment, especially for whites. Since educational attainment is known to be a powerful determinant of occupational status and earnings, early childbearing is likely to diminish the overall career attainment of women.

Although the relationships here are undeniable, how one should interpret

---

[2]Proposed explanations of this difference, which prevails throughout the adolescent age range, focus on two cultural differences between blacks and whites: (a) the lesser degree of social stigma that is associated with premarital childbearing among blacks, and (b) the more highly evolved social mechanisms within the black family for coping with parenthood (Waite and Moore, 1978; Furstenberg and Crawford, 1978). According to this view, the young black mother's life is less severely interrupted than that of her white counterpart by the presence of the baby, and she is better able to stay in school during pregnancy and continue with her education thereafter.

them is less certain. The uncertainty here arises from the possibility, mentioned earlier, that teenagers who bear children may differ in unmeasured ways from other teenagers (including their later-childbearing peers). If so, entry into parenthood would be associated with, but not cause, lower educational attainment. Pregnancy may be more common among young women with relatively low educational aspirations and provide those who wish to leave school with an excuse for doing so. There is suggestive evidence of personality differences between early childbearers and their classmates (Gispert and Falk, 1976; Sitkin, 1972). These preexisting differences between parents and nonparents may account for some of the differences in educational attainment.

The most important conclusion here, for our purposes, derives from recent evidence that an early birth is more disruptive for the more advantaged adolescents (e.g., high academic achievers and those from high SES families). Since these groups stand to attain more schooling than their less advantaged classmates, they have more to lose by an early birth.

Subsequent Economic Well-Being

Early parenthood affects economic well-being indirectly for the most part. For example, the mother's economic well-being is tied as much to her marital status and her husband's earning capacity as to her own earnings. Thus, an early first birth may be harmful to her not only by limiting her job experience (and hence her own earnings) but also by limiting other possibilities of support. Moreover, the likelihood of poverty increases when teenage parenthood disrupts schooling and induces an orientation toward employment that leads to maximizing current income without regard to future prospects. Many studies (e.g., Coombs and Freedman, 1970; Hofferth and Moore, 1979) reveal a continuing income and asset disadvantage over time by those who become parents in adolescence.

Some studies have attempted to disentangle the separate effects operating here through multivariate analysis, using statistical estimates of the effects based on observational studies. Such estimates must be regarded with skepticism, since they are generated from questionable assumptions and are based on retrospective samples of adolescent childbearers that do not generalize directly to contemporary childbearers. Nevertheless, such estimates are the best indications we have of the net effects of an early birth on subsequent economic well-being:

- A delay in the age at first birth prolongs school attendance and therefore makes the young woman and her household economically better off in adulthood. One study (Hofferth and Moore, 1979) estimates that if a woman who bore her first child by age 18 or younger had delayed that birth one additional year, the following effects would have ensued: (a) Total annual household income at age 27 would be $1293 higher, partly because of the greater likelihood that the woman would

be married and benefiting from her husband's income; (b) her own annual earnings at age 27 would be $73 higher; and (c) the probability of her household being in poverty at age 27 would be reduced about one-fifth. These effects appear to be limited to first births occurring at age 18 or younger. On the other hand, results of another study (Card and Wise, 1978) suggest further that, 11 years after high school, adolescent fathers had incomes similar to their classmates who were not fathers as adolescents. Adolescent fathers, however, often start off with relatively high-paying union jobs and begin receiving raises, giving them a head start over their classmates who continue in school. It takes their classmates many years after high school to catch up, at which point they begin to realize the increased income associated with their further investment in education. Thus, Card and Wise (1978) caution that the 11-year time frame imposed by their data cannot show what happens thereafter and note that the classmates' income will likely surpass that of the less educated teenage fathers.

- Adolescent parents are much more likely than their classmates to hold low-prestige jobs.[3]
- There is a strong association between early childbearing and receipt of welfare.[4]

In addition to these economic effects, the marriages formed under circumstances of teenage pregnancy appear to be less stable than others (see Furstenberg, 1976b; Coombs and Zumeta, 1970). This effect would seem to confirm the conventional wisdom that the combination of early marriage plus parenthood poses unique difficulties. On the other hand, marriages between people who are not fully matured may be inherently unstable, and the presence of children might well act to prevent marital dissolution. Thus, it may be the youthfulness of the couple, rather than an early first birth per se, that results in marital breakups. Evidence from Moore and Hofferth (1978) favors this latter conclusion. Allowing for age at marriage, they found that age at first birth had no positive effect on the incidence of divorce or separation among 24-year-old women. Thus, it appears that teenage childbearing affects the risk of divorce and separation indirectly rather than directly, i.e., by precipitating early marriages rather than by destabilizing them.

FURTHER CHILDBEARING

Parenthood in early adolescence often marks the beginning of a rapid succession of unwanted births. Women who start childbearing in their teens

[3]One study with long-term follow-up (Card and Wise, 1978) found adolescent childbearers overrepresented in blue-collar jobs and underrepresented in the professions 11 years after high school.

[4]This association may be attributable to differences between young parents and nonparents in education, family size, labor force participation, age at marriage, and race (Moore and Hofferth, 1978).

have more children, have them closer together, and bear more unwanted children than do women who delay first births (Trussell and Menken, 1978; Menken, 1975; Bonham and Placek, 1975; Bumpass et al., 1978). Apparently, this results less from conscious intent than from more frequent occurrences of unplanned births.

To what extent the early first birth should be seen as a causal factor here is less clear (Busfield, 1972). The more rapid pace of subsequent childbearing that is a characteristic of early childbearers may well be the product of self-selection: People who want to have children may marry early or begin reproducing early, or both, and reproduce at a rapid pace. Bonham and Placek (1978), for example, report that the younger the woman is at the time of her first birth, the more children she eventually expects to have. Differential fecundity (which cannot be directly measured) or inept contraceptive practice also could account for an observed association between early and more frequent childbearing without there being a causal link. Again, self-selection may well account for part, if not all, of the observed relationships here.

To the extent that early childbearing does initiate a career of rapid childbearing and lead to higher completed fertility, it must be regarded as indirectly disruptive of attainment. A young mother's first pregnancy may only interrupt her education, but bearing additional children usually ends it for good. Putting matters another way, postponing an early first birth would enable the young man or woman to experience a range of lifetime activities other than childbearing that contribute to individual self-realization.

CONCLUSION

Parenthood is linked to adolescents' lives in a variety of ways, and the linkages generally are stronger the younger the age at which the first birth occurs. Research has not, however, established the extent to which parenthood plays a causal role. There is strong circumstantial evidence, to be sure, that a person who manages to avoid involvement with reproduction during adolescence will acquire more of the schooling and training necessary to realize his or her full potentialities as a self-sufficient adult, and will be better off economically in adulthood. Little is known about the extent to which parenthood also stifles aspirations and the development of life goals.

III. DATA AND METHODOLOGY

NLS DATA BASE

The NLS was designed by the National Center for Education Statistics to provide a comprehensive data base for studying the educational, vocational, and personal development of high school graduates as they pass through the critical years of early adulthood. The information gathered through the NLS provides a unique opportunity to examine the extent to which personal, familial, institutional, and social factors influence the development of American youth.

The NLS began in the spring of 1972 when 19,001 seniors from 1061 high schools were asked to complete lengthy questionnaires and take a 69-minute test battery measuring both verbal and nonverbal abilities. The participating schools were also asked to provide further information about the seniors from their student record files. Later, three follow-up surveys were administered in the fall of 1973, 1974, and 1976 to over 23,000 members of the same graduating class, including most of the seniors who were in the base year sample.

This study is based on a voluminous file of information on 22,652 members of the Class of 1972 for whom data were available from one or more of the surveys.[1] The file contains almost 2500 variables for each participant, most of which are derived from items on the four survey questionnaires. In addition to providing data about postsecondary educational patterns, family formation, labor market participation, and economic characteristics, the file contains numerous items pertaining to the participants' plans, aspirations, and attitudes. Even though all the questionnaires ran 28 pages or longer, response rates of over 85 percent were achieved on all four surveys, providing a remarkably complete source of detailed information on the lives of the NLS participants.

Information on marital status was gathered on all three follow-up surveys, and married respondents were asked their dates of marriage. The participants were also asked how many children they had on each of the follow-up surveys, enabling us to pinpoint quite accurately the date of marriage and timing of first birth for most of the respondents.

Valuable as it is as a source of information about the consequences of early marriage and parenthood, the NLS has certain limitations:

- *Exclusion of high school dropouts*: The NLS sample includes only those adolescents who were still in high school in the spring of their senior year, thereby excluding all high school dropouts (many of them undoubtedly adolescent parents). Since the latter are likely to have fol-

[1]For documentation of the NLS data, see Levinsohn et al. (1978).

lowed considerably different patterns of development, this places an important limitation on the generalizability of NLS-based findings.

- *Missing values*: Despite high response rates on each survey wave, the problem of missing values is pervasive on the NLS, since few respondents responded to all items on the lengthy questionnaires.
- *Time period covered*: Only the first four waves of data were available for this analysis, limiting our perspective to the near-term consequences of parenthood (i.e., those that have been revealed by about 22 years of age). Longer-term consequences will not appear until later in life, although some (e.g., those that accompany failure to complete college) may be implied or foreshadowed by the age of 22.
- *Restriction to a single cohort*: The NLS presents interpretational problems that always attend the analysis of a single cohort, i.e., the difficulties in separating the effects of secular change and maturation.

Offsetting these limitations are the following advantages:

- *Large sample size*: The NLS sample contains 1248 respondents who were parents by October 1973, a point at which most had recently turned 19 years old. An additional 1331 respondents became parents during the next twelve months. These sample sizes are large enough to support very detailed analyses.
- *Timeliness*: The NLS data document entry into parenthood during the early 1970s, not some indefinite earlier period, as is often the case with retrospective data.
- *Availability of comparison groups*: It is possible to compare, for example, parents with nonparents, persons who became parents at younger vs. older ages, and married parents with married nonparents.
- *Richness of background data*: The NLS contains numerous background measures that are pertinent to a study of the consequences of parenthood, including measures of ability, scholastic performance, socioeconomic status (SES), race, and religion.
- *Information on postsecondary activities and attitudes*: In addition to providing information on changes in marital status, number of children, educational activities, employment patterns, and economic characteristics, the NLS contains items pertaining to the aspirations, expectations, and attitudes of the NLS participants. These measures permit researchers to delve more deeply into the factors that affect the postsecondary behavior and decision processes of young people as they undergo the critical years of early adulthood.

An important feature of the NLS is that the base year questionnaire contained numerous questions about the seniors' postsecondary plans, career aspirations, educational expectations, and attitudes. These measures serve as baseline measures or "prescores" in assessing the effects of family formation and other factors that may modify people's plans and reshape their lifetime goals. The existence of these prescores and the richness of the background

information distinguish the NLS from other large panel studies as a basis for studying the maturation process in American youth.

THE FOUR WAVES OF THE NLS

Figure 1 shows the approximate timing of the four waves of the NLS. The questionnaires for the follow-up surveys were mailed in October 1973, 1974, and 1976. Although efforts were made to increase response rates through April or May of the following year, the respondents were instructed to report their current statuses as of the first week of October. Hence, the follow-up surveys can be treated as though all respondents were surveyed in early October.

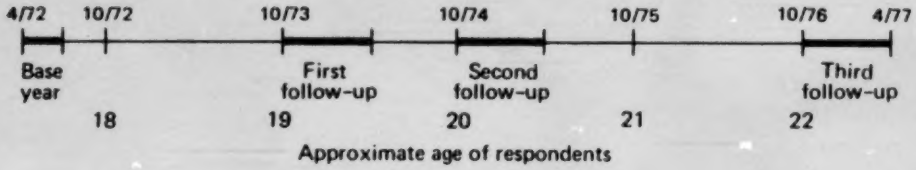

Fig. 1—Timing of NLS Surveys

Figure 1 also shows the approximate age of the respondents as of each survey. There is little variation in age among the NLS respondents: 73 percent were born in 1954, 20 percent in 1953, 4 percent before 1953, and 3 percent after 1954. Most respondents, then, were either 17 or 18 at the time of the base year survey and turning 20 about the time of the second follow-up.

The composition of the NLS sample changed between successive waves of the survey. The initial sample design called for first selecting a national probability sample of 1200 schools and then choosing 18 seniors at random from each school. The schools were selected by stratified sampling using strata determined by (1) type of control (public or private), (2) geographic region, (3) size of senior class, (4) proximity to institutions of higher education, (5) percentage minority group enrollment, (6) income level of the community, and (7) degree of urbanization. Schools located in low-income areas and schools with high proportions of minority students were oversampled at approximately twice the sampling rate used for the remaining schools.

Of the 1200 schools that were selected initially, 21 had no seniors and 231 others either refused to participate or could not participate because the request was received too late in the year. The remaining 948 schools in the initial sample were later augmented by 113 backup schools that were similar in composition to the nonparticipating schools. Of the 19,001 seniors selected from these 1061 schools, 16,683 completed the Base Year Questionnaire in the spring of 1972. At about the same time, the participating schools were asked to

administer a battery of tests to the seniors in the sample and fill out forms providing information from student records.

The base year sample was further augmented in the three follow-up surveys to include 1300 schools on the first follow-up survey and 1318 on the second and third follow-ups, bringing the total number of seniors in the NLS sample to 23,451. This study is based on a data file containing information on 22,652 "participants" in the NLS, i.e., those seniors in the NLS sample who either were respondents to one of the four questionnaires or were individuals for whom test battery scores or information forms were provided by their schools.[2]

RESPONSE RATES

Although only 14,112 (62 percent) of the participants responded to all four waves, the response rates for the individual surveys were surprisingly high considering the lengths of the questionnaires. The sample sizes and numbers of respondents to each of the four waves were as follows:

Survey	Number in Sample	Number of Respondents	Response Rate
Base Year	19,001	16,683	87.8%
First Follow-up	23,122	21,350	92.3
Second Follow-up	23,451	28,872	89.0
Third Follow-up	23,451	20,092	85.7

These response rates are based upon the total number of individuals in the NLS sample, not the number of potential respondents who received questionnaires. Many members of the initial sample were dropped from the follow-up mailing lists because of prior refusals, reported deaths, and other reasons. As a result of this natural attrition in active NLS participants over time, the Third Follow-up Questionnaire was mailed to only 21,807. Thus, the 20,092 respondents to the third follow-up survey accounted for 92 percent of the mailouts. The corresponding rates for the first and second follow-ups were 94 and 93 percent.

These remarkably high response rates, achieved in part through the use of telephone follow-up operators to elicit partial responses to key questions, overstate the completeness of responses to individual items of relevance to this study. For example, among the 21,350 respondents to the First Follow-up Survey, 2375 (11 percent) did not respond to the question, "What was your marital status, as of the first week of October 1973?" The frequency of missing (and sometimes inconsistent) responses to questions about marital and parent-

[2]There were 149 NLS participants whose gender could not be ascertained from the survey results. Excluding those cases throughout the study reduced our sample size to 22,503.

hood status raised problems in pinpointing the timing of family formation that will be discussed in the next section.

OUTCOME MEASURES

The main purpose of this study is to determine how entry into parenthood during adolescence affects the educational, vocational, and personal development of young people. In carrying out the study, we were necessarily restricted to observations on the NLS participants over the four-year period after they leave high school; some consequences of adolescent parenthood may not appear for many years. However, even the long-delayed consequences may be partly foreshadowed through earlier changes in aspirations and attitudes.

The outcome measures to be analyzed in this study can be grouped into the following areas:

- Postsecondary education
- Career development
- Women's orientation toward homemaking
- Dependency on parents and society
- Economic characteristics
- Fertility
- Attitudes

The complete list of outcome measures is given in Table 3.1. The specific variables used to measure these outcomes are defined in App. A in terms of particular responses to questionnaire items. The numerical suffixes such as "72" on the variable names indicate the year to which the measure applies.

For example, EDEXP73 is a measure of educational expectations derived from the response to the following question on the first follow-up survey: "As things stand now, how far in school do you think you actually will get?" The possible responses are listed below with the coding of EDEXP73 indicated in parentheses.

High school only (12)

Vocational, trade, or business school
- Less than two years (13)
- Two years or more (14)

College program
- Some college (including two-year degree) (14)
- Finish college (four- or five-year degree) (16)
- Master's degree or equivalent (18)
- Ph.D., M.D., or equivalent (20)

In this case, the numerical suffix "73" on EDEXP73 corresponds to the year of the survey. In a few cases, the suffix will correspond to the year for which

Table 3.1

Outcome Measures

Outcome Measure	Variable Name
Postsecondary Education	
Planning to attend college the following year [1]	EDPLAN72, -73, -74, -76
Enrollment status [1]	STUDY72, -73, -74, -76
Years of educational attainment as of October 1976	EDGOT76
Years of educational attainment expected	EDEXP72, -73, -74, -76
Career Development	
Planning to be employed next year [1]	JOBPLAN72, -73, -74, -76
Employment status [1]	JOB72, -73, -74, -76
Career aspiration index	CARASP72, -73, -74, -76
Planning a professional career [1]	PROASP72, -73, -74, -76
Occupational index as of October 1976	CAREER76
Satisfaction with career progress	JOBSAT76
Women's Orientation Toward Homemaking	
Planning to be a homemaker next year [1]	HOMEPLAN72, -73, -74,-76
Homemaker status [1]	HOME72, -73, -74, -76
Planning to be a homemaker at age 30 [1]	HOMASP72, -73, -74, -76
Economic Characteristics	
Family income [2]	INCOME75, -76
Weekly wages	PAYWK74, -76
Hours worked per week	HRSWK74, -76
Hourly pay	PAYHR74, -76
Perceived economic well-being	WELLOFF74
Dependence on Parents and Society	
Living with parents or relatives [1]	ATHOME73, -74, -76
Financially dependent on parents, relatives, or friends for more than half of support [1]	BURDEN73, -74, -76
Receiving public assistance or welfare [1]	WELFARE75, -76
Fertility	
Number of children	NCHILD73, -74, -76
Expected number of children	KIDX73, -76
Expecting a child between October 1976 and October 1977 [1]	EXPECT76
Expecting no more children after October 1976 [1]	NOMORE76
Attitudes	
Self-esteem	ESTEEM72, -73, -74, -76
Locus of control	LOCUS72, -73, -74, -76
Orientation toward work	WORK72, -73, -74, -76
Orientation toward community	COMM72, -73, -74, -76
Orientation toward family	FAM72, -73, -74, -76
Attitudes toward male and female work roles	FROLEA76, FROLEB76

NOTES:
[1] = Indicator variable having the value one (or zero) if the condition applies (or does not apply).
[2] = Vector with six components for own wages, spouse's wages, income from public assistance and welfare, income from unemployment compensation, other income, and total income.

the status was reported on a later survey. For example, the enrollment status indicator variable STUDY72 has the value one for respondents who reported on the first follow-up survey (in 1973) that they were enrolled as a student in October 1972.

For the most part, the outcomes were measured on all four waves of the survey, enabling us to use the base year measure as a prescore against which the later measures could be compared. However, one must exercise care in making such comparisons because of changes over time in both the order and the wording of questionnaire items (especially between the base year and first follow-up surveys).

In examining the effects of teenage marriage and parenthood, we shall regard changes in aspirations and attitudes as likely precursors of long-term consequences. We cannot hope to ascertain the extent to which motherhood truncates a woman's eventual educational attainment or diminishes her lifetime earnings, because our data do not extend over a lifetime. However, her long-term aspirations, measured two or three years after delivering a child, provide clues. Of course, we shall point out many of the apparent short-term effects of parenthood, such as dips in college enrollment rates and shifts from employment to homemaker status. But the primary emphasis in this study will be to determine which effects of teenage parenthood are likely to reshape the lives of young people, and which are more transitory, such as postponing college entrance for a term. For this reason, this study will focus more intensively on educational and vocational *aspirations* than on educational and employment patterns, which may prove misleading over the long term.

Fortunately, the members of the Class of 1972 who participated in the base year survey were queried about both their educational and career goals while they were still high school seniors. Although the questions were changed somewhat between the base year survey and the follow-up survey, the base year measures serve as valuable "prescores" in gauging the effects of early family formation.

For the purposes of analyzing the long-term consequences of parenthood upon career development, a career aspirations index was developed based upon the responses to the question, "What kind of work will you be doing when you are 30 years old?" The derivation of this index will be discussed in Sec. VII. The measures of attitudes listed in Table 3.1 will be defined in Sec. XI.

The means, standard deviations, and sample sizes for the outcome measures are given in Table 3.2. The variation in sample sizes across measures results primarily from the fact that the Base Year Questionnaire was not administered to 19 percent of the members of the NLS sample.

BACKGROUND FACTORS

It will be seen in Sec. IV that the members of the Class of 1972 who became parents while still teenagers differ in many respects from those who postponed

Table 3.2

Sample Means and Standard Deviations of the Outcome Measures

Outcome Measure	Year	Females			Males		
		Mean	Standard Deviation	N	Mean	Standard Deviation	N
Postsecondary Education							
Planning to Attend College the Following Year	1972	0.58	0.49	8353	0.57	0.50	8228
	1973	0.52	0.50	10746	0.59	0.49	10361
	1974	0.47	0.50	10555	0.55	0.50	10153
	1976	0.28	0.45	10026	0.34	0.47	9547
Enrollment Status	1972	0.53	0.50	10822	0.54	0.50	10462
	1973	0.43	0.50	10858	0.46	0.50	10482
	1974	0.37	0.48	10619	0.41	0.49	10237
	1976	0.22	0.41	10175	0.29	0.45	9746
Years of Educational Attainment, 1976	1976	13.30	1.40	10111	13.33	1.35	9687
Years of Educational Attainment Expected	1972	14.41	1.99	6319	14.89	2.07	5962
	1973	14.28	2.16	10133	14.87	2.36	9619
	1974	14.42	2.25	9698	14.94	2.37	9099
	1976	14.78	2.40	9461	15.17	2.46	9137
Career Development							
Planning to be Employed Next Year	1972	0.33	0.47	8353	0.38	0.48	8228
	1973	0.70	0.46	10746	0.75	0.44	10361
	1974	0.69	0.46	10555	0.75	0.43	10153
	1976	0.75	0.43	10026	0.86	0.35	9547
Employment Status	1972	0.51	0.50	10872	0.61	0.49	10546
	1973	0.60	0.49	10877	0.67	0.47	10551
	1974	0.62	0.49	10619	0.74	0.44	10237
	1976	0.69	0.46	10180	0.82	0.38	9751
Career Aspiration Index	1972	51.17	18.25	6587	47.21	20.99	5981
	1973	47.77	16.27	9791	46.31	21.42	9361
	1974	47.38	16.29	9602	45.98	21.24	9092
	1976	46.84	15.90	9657	44.28	20.46	9269
Planning a Professional Career	1972	0.47	0.50	6587	0.41	0.49	5981
	1973	0.40	0.49	9791	0.38	0.49	9361
	1974	0.38	0.49	9602	0.37	0.48	9092
	1976	0.36	0.48	9657	0.31	0.46	9269
Occupational Index as of October 1976	1976	35.10	12.48	6803	29.58	14.85	7951
Satisfaction with Career Progress	1976	3.05	0.81	9850	3.03	0.80	9366

Table 3.2—continued

Outcome Measure	Year	Females Mean	Females Standard Deviation	Females N	Males Mean	Males Standard Deviation	Males N
Women's Orientation Toward Homemaking							
Planning to be a Homemaker Next Year	1972	0.06	0.23	8353			
	1973	0.34	0.47	10746			
	1974	0.40	0.49	10555			
	1976	0.43	0.49	10026			
Homemaker Status	1972	0.14	0.35	5720			
	1973	0.26	0.44	4916			
	1974	0.29	0.45	10612			
	1976	0.42	0.49	10189			
Planning to be a Homemaker at Age 30	1972	0.06	0.23	6587			
	1973	0.24	0.43	10005			
	1974	0.25	0.43	9837			
	1976	0.24	0.43	9841			
Economic Characteristics							
Income 1975:							
Respondent's Wages	1975	3201	3186	7454	5509	4409	7242
Spouse's Wages	1975	3280	5122	7454	725	1937	7242
Public Assistance and Welfare	1975	60	394	7454	18	204	7242
Unemployment Compensation	1975	75	400	7454	118	506	7242
Other	1975	241	1052	7454	247	1101	7242
Total	1975	6857	6027	7454	6617	5106	7242
Income 1976:							
Respondent's Wages	1976	4065	4026	7264	6691	5080	7040
Spouse's Wages	1976	4040	5880	7264	1017	2787	7040
Public Assistance and Welfare	1976	69	419	7264	17	189	7040
Unemployment Compensation	1976	78	421	7264	100	464	7040
Other	1976	280	1387	7264	300	1323	7040
Total	1976	8532	6947	7264	8124	6215	7040
Weekly Wages	1974	96.48	54.50	5271	140.06	77.03	5854
	1976	136.07	72.89	5130	190.51	110.68	6321
Hours Worked per Week	1974	34.80	12.30	5271	40.20	14.16	5854
	1976	37.44	10.38	5130	42.66	12.75	6321
Hourly Pay	1974	2.79	1.76	5271	3.51	1.92	5854
	1976	3.66	1.93	5130	4.51	2.38	6321
Perceived Economic Well-being	1974	3.46	1.28	9972	3.40	1.29	9343

Table 3.2—continued

Outcome Measure	Year	Females Mean	Females Standard Deviation	Females N	Males Mean	Males Standard Deviation	Males N
Dependency on Parents and Society							
Living with Parents or Relatives	1973	0.50	0.50	10222	0.56	0.50	9671
	1974	0.39	0.49	10013	0.45	0.50	9412
	1976	0.29	0.45	9920	0.33	0.47	9465
Financially Dependent on Parents, Relatives, or Friends for Support	1973	0.47	0.50	10219	0.40	0.49	9717
	1974	0.39	0.49	9960	0.31	0.46	9316
	1976	0.19	0.39	9138	0.18	0.38	9544
Receiving Public Assistance or Welfare	1975	0.04	0.20	8104	0.02	0.12	7659
	1976	0.05	0.21	7911	0.02	0.13	7453
Fertility							
Number of Children	1973	0.09	0.32	10960	0.04	0.21	10736
	1974	0.19	0.46	10894	0.10	0.34	10582
	1976	0.37	0.65	10170	0.24	0.56	9729
Expected Number of Children	1973	2.25	1.03	10010	2.08	1.09	8910
	1976	2.25	1.17	9880	2.24	1.27	9258
Expecting a Child Between Oct 76 & Oct 77	1976	0.14	0.34	7460	0.13	0.34	5889
Expecting No More Children After 1976	1976	0.19	0.39	7460	0.19	0.40	5889
Attitudes							
Self-esteem	1972	3.89	0.67	8365	3.96	0.63	8217
	1973	4.10	0.56	10356	4.14	0.54	9744
	1974	4.15	0.60	10019	4.24	0.57	9399
	1976	4.21	0.60	9921	4.32	0.56	9403
Locus of Control	1972	3.79	0.73	8360	3.65	0.74	8204
	1973	3.86	0.68	10352	3.78	0.67	9728
	1974	3.86	0.70	10006	3.78	0.72	9385
	1976	3.91	0.70	9917	3.86	0.72	9398
Orientation Toward Work	1972	2.46	0.36	8366	2.59	0.36	8228
	1973	2.36	0.39	10374	2.51	0.36	9763
	1974	2.36	0.40	9983	2.50	0.37	9369
	1976	2.35	0.41	9937	2.52	0.35	9416
Orientation Toward Community	1972	2.14	0.43	8353	2.13	0.47	8210
	1973	2.04	0.43	10358	2.07	0.47	9739
	1974	2.00	0.43	9979	2.03	0.47	9359
	1976	1.96	0.43	9935	2.01	0.47	9409
Orientation Toward Family	1972	0.95	0.40	8257	0.91	0.41	8083
	1973	1.05	0.36	10209	1.00	0.37	9599
	1974	1.07	0.37	9894	1.01	0.37	9278
	1976	1.09	0.36	9826	1.02	0.36	9299
Attitudes Toward Male and Female Work Roles							
Measure A	1976	2.16	0.55	9070	2.38	0.50	8314
Measure B	1976	2.51	0.47	9070	2.40	0.43	8314

having children until later. Our methodology will attempt to draw inferences about the consequences of early parenthood by comparing the outcome measures of the early parents with those of the NLS participants who became parents later or remained childless through 1976. In drawing these inferences, we shall need to allow for differences among the groups in background factors.

Table 3.3 lists the background factors that were incorporated into this analysis. The variables in Table 3.3 are defined in App. A. Table 3.4 provides the means, standard deviations, and sample sizes for these variables.

This list of variables was culled from a much longer list that was compiled from our reading of the literature, a discriminant analysis contrasting the early parents with the other NLS participants, and variable selection procedures relevant to the linear regression techniques outlined in the next section.

The ability composite score ABLE is the sum of the scaled scores for four tests on vocabulary, reading, letter groups, and mathematics that were administered to the NLS seniors in the spring of 1972. Each test score was scaled to have a mean of 50 and a standard deviation of 10. The four tests for the composite index ABLE were chosen on the basis of a factor analysis reported in Levinsohn et al. (1978).

The percentile rank in class indicates how the NLS participants ranked among their high school classmates. For example, a percentile rank of 25 means that the senior's overall grade point average was above 25 percent of the class and below the remaining 75 percent.

The father's occupational index, SEIFAOCP, is the Duncan SEI score corresponding to the census code for the father's occupation. Since analogous codes were not available for the mother's occupation, we created two indicator variables, one indicating whether the mother was a homemaker, the second whether she was a professional worker (doctor, lawyer, teacher, social worker, scientist, etc.).

METHODOLOGY FOR ASSESSING EFFECTS OF EARLY PARENTHOOD

Our primary objective is to explore how entry into parenthood affects the lives of young people, especially those who become parents in their late teens. At first blush, this may appear to be a straightforward task, given the detailed information on the young parents before and after they entered parenthood. But before-and-after comparisons of, say, educational patterns and occupational choices may provide distorted assessments of the consequences of parenthood, because numerous other factors may have caused the observed changes.

For those who become parents within a year or two after leaving high school, the complications of pregnancy and childbearing occur at a time when most teenagers' lives are in a state of flux. Upon leaving high school, most teenagers undergo abrupt changes in environment, changes that lead to both unaccustomed freedoms and new restraints. As high school fantasies give way to the realities of living away from parents and coping with the demands of

Table 3.3

Background Factors

Characteristic	Variable Name
Race/Ethnicity Classification	
American Indian [1]	INDIAN
Black, Afro-American, or Negro [1]	BLACK
Mexican-American, Chicano, Puerto Rican, or other Latin-American origin [1]	HISPANIC
Oriental or Asian-American [1]	ORIENTAL
Other minority [1]	OTHER
White or Caucasian [2]	
Region	
Northeast [1]	NEAST
South [1]	SOUTH
West [1]	WEST
North Central [2]	
Religion	
Roman Catholic [1]	CATHOLIC
Jewish [1]	JEWISH
All others [2]	
Ability and Scholastic Performance	
Ability composite score	ABLE
Percentile rank in class	RANK
High School Program	
Academic or college preparatory [1]	ACADEMIC
Vocational-technical [1]	VOCTECH
General [2]	
Socioeconomic Status	
Father's educational attainment	EDPA
Mother's educational attainment	EDMA
Duncan SEI score of father's occupation	SEIFAOCP
Mother's professional status [1]	MAPROF
Mother's homemaker status [1]	MAHOME
Logarithm of family income	LNFAMINC
Other Background Factors	
Number of siblings	SIBS
Number of siblings in college	SIBSCOLL
College plans of close friends [1]	PALSCOLL

NOTES:

[1] = Indicator variable having the value one (or zero) if the condition applies (or does not apply).

[2] = Omitted category for which no indicator variable was defined.

Table 3.4

Sample Means and Standard Deviations of the Background Factors

Background Factor	Variable Name	Females Mean	Females Standard Deviation	Females N	Males Mean	Males Standard Deviation	Males N
Race/Ethnicity Classification							
American Indian	INDIAN	0.01	0.10	11274	0.01	0.11	11084
Black, Afro-American, or Negro	BLACK	0.16	0.36	11274	0.12	0.33	11084
Mexican-American, Chicano, Puerto Rican	HISPANIC	0.04	0.20	11274	0.04	0.21	11084
Oriental or Asian-American	ORIENTAL	0.01	0.10	11274	0.01	0.11	11084
Other minority	OTHER	0.03	0.16	11274	0.03	0.16	11084
Region							
Northeast	NEAST	0.22	0.41	11336	0.20	0.40	11167
South	SOUTH	0.36	0.48	11336	0.35	0.48	11167
West	WEST	0.16	0.37	11336	0.18	0.39	11167
Religion							
Roman Catholic	CATHOLIC	0.30	0.46	10401	0.30	0.46	10014
Jewish	JEWISH	0.02	0.15	10401	0.02	0.15	10014
Ability and Scholastic Performance							
Ability composite score	ABLE	200.53	33.32	7956	199.98	34.13	7898
Percentile rank in class	RANK	58.39	27.16	8454	46.71	27.61	8358
High School Program							
Academic or college preparatory program	ACADEMIC	0.37	0.48	11321	0.42	0.49	11144
Vocational-technical program	VOCTECH	0.28	0.45	11321	0.21	0.40	11144
Socioeconomic Status							
Father's educational attainment	EDPA	12.30	2.74	10180	12.47	2.76	9527
Mother's educational attainment	EDMA	12.12	2.05	10243	12.23	2.07	9583
Duncan SEI score of father's occupation	SEIFAOCP	40.04	23.17	9490	40.94	23.24	9174
Mother's professional status	MAPROF	0.11	0.31	7020	0.11	0.31	6465
Mother's homemaker status	MAHOME	0.56	0.50	7020	0.56	0.50	6465
Logarithm of family income	LNFAMINC	9.11	0.64	7965	9.22	0.61	8606
Other Background Factors							
Number of siblings	SIBS	2.88	1.57	7920	2.80	1.56	7594
Number of siblings in college	SIBSCOLL	0.34	0.63	8313	0.36	0.66	8138
College plans of close friends	PALSCOLL	0.57	0.50	10323	0.55	0.50	10109

full-time jobs, college attendance, or military service, many young people reassess their goals and change their directions, whether or not they become parents. Hence, attempts to assess the consequences of early parenthood based on observed changes in the activities and pursuits of young parents must allow for the numerous other factors that might account for those changes.[3]

To separate the effects of early parenthood from the effects of other factors, it is natural to compare the changes in outcome measures among young parents with analogous changes for "comparable" nonparents with similar background characteristics. In adopting the statistical procedure below that implicitly builds upon this notion, we acknowledge that our methodology depends on an unverifiable assumption about the comparability of parents and nonparents that is open to challenge. As will be seen in Sec. IV, the early parents in the NLS differ in many respects from the nonparents; in particular, they tended to rank somewhat lower than their classmates in ability, scholastic performance, and SES. In contrasting changes in outcome measures for the two groups, we use regression techniques to allow for *observed* differences in background characteristics; of course, we cannot preclude the possibility that there may be other differences that should be accounted for as well.

Although our primary purpose is to assess the consequences of parenthood, one of our main concerns is to distinguish the consequences of parenthood from those associated with early marriage. Among adolescent parents, the marriage date is often closely linked to the date of pregnancy, making it difficult to ascertain whether observed changes are attributable to parenthood or marriage or both. Whether or not a young couple have children, they ordinarily face changing circumstances and economic exigencies when they wed that may lead them to modify their short-term plans, reassess their career goals, and even redirect their lives. Careful studies comparing young childless couples with similar couples having children may show that early marriage, not parenthood, has the more serious consequences on some outcome measures. Waite and Moore (1981) found that, among young wives, teenage parenthood did not appear to increase the risk of later divorce or separation, whereas teenage marriage significantly raised it.

Also, we want to determine the extent to which changes in the outcome measures are related to the timing of adolescent parenthood or early marriage. It is well established in the literature that there is a close relationship between the effects of parenthood and the age of the mother.

Fortunately, the large sample size of the NLS enables us to categorize respondents into relatively homogeneous groups by sex, marriage date, and timing of first birth and still have a large number of cases within each group. The effects of parenthood can then be inferred by comparing the group means over time and across groups, adjusting for differences across the groups in background factors that are correlated with the outcome measures.

For the purposes of this study, the NLS respondents of each sex were first

[3]This study concentrates on the effects of early family formation. Kanouse et al. (1980), a companion study by the same authors, focuses on the effects of other postsecondary experiences.

classified by parenthood and marital status as of October 1976. The parents were further classified in terms of timing of entry into parenthood, and the "ever married" respondents were classified according to their marriage dates. (Section IV gives the specifications of these categories.) Our objective is to compare the outcome measures across these categories of NLS participants, adjusting for differences in background factors, to deduce the effects of early family formation.

Our statistical procedures for comparing the outcome measures across categories of respondents are based upon two premises: (1) The "effects" of marriage and/or parenthood vary from individual to individual depending on a multitude of factors, many of which are unknown, and (2) these effects can be estimated for a particular individual by comparing changes over time in the individual's outcome measures with estimates of the expected changes for individuals in a suitably chosen "control group" with similar background characteristics.

To make these ideas more precise, consider an individual with vector of characteristics X, whose outcome measures before and after parenthood are Y_1 and Y_2. In general, the "gain score" $G = Y_2 - Y_1$ is not a good estimator of the effect of parenthood, because it does not allow for natural growth in the attribute being measured, changes in the metric over time, and other intertemporal factors that affect the measures. To control for these other factors, let $h_1(X)$ and $h_2(X)$ be the values that one would predict for Y_1 and Y_2 based upon observations on individuals with similar characteristics in a control group. Then another estimator of the effect of parenthood that adjusts the gain score to allow for the effects of intertemporal factors is

$$D = (Y_2 - Y_1) - [h_2(X) - h_1(X)].$$

Rewriting this in the form

$$D = [Y_2 - h_2(X)] - [Y_1 - h_1(X)],$$

we see that D is the difference in the deviations of the measures Y_i from their predicted values $h_i(X)$. That is, D is another gain score based upon different metrics at the two time points. These metrics are prescribed in terms of functions $h_1(X)$ and $h_2(X)$ that reflect average behavior in the control group.

Ignoring for the moment the problem of determining the predictors $h_i(X)$, suppose $D_1, D_2, \ldots, D_n$ are the estimated individual effects for n parents with vectors of characteristics $X_1, X_2, \ldots, X_n$. Then the corresponding estimate of the average parenthood effect for the parents in this group is $\bar{D} = \Sigma D_i/n$. If the predictors are linear in X, then

$$\bar{D} = [\bar{Y}_2 - h_2(\bar{X})] - [\bar{Y}_1 - h_1(\bar{X})],$$

where $\bar{Y}_1$ and $\bar{Y}_2$ are the means of the parents' outcome measures before and after they become parents, and $\bar{X}$ is the mean vector for the vectors of characteristics.

Appendix B describes a multivariate analysis of covariance model that

embodies these assumptions. It is implicit in this model that the effects of marriage and parenthood are defined as deviations from the pattern for similar individuals in a control group. The selection of a suitable control group is therefore a matter of some importance. For example, in considering the effect of parenthood, should the control group consist of all nonparents at some point in time? At what point in time? Should single parents be compared only with single nonparents, and married parents only with married nonparents? Should parents as of October 1973 be compared with those who became parents the following year?

Our solution to this quandary is to provide summary statistics that will enable readers to decide for themselves what the appropriate comparison group will be. We also provide more detailed comparisons between the early parents and two specific control groups of NLS members who remained childless through October 1976: the never married nonparents in October 1976, and the nonparents in October 1976 who married before October 1973. The second group serves as control group for gauging outcome measures for the early parents who became married before October 1973.

The analyses using individual effects models will be supplemented by ordinary analysis of covariance models using the gains between 1972 and 1976 as dependent variables, and other factors in addition to parenthood and marital status as independent variables. In all cases, analyses for males and females will be presented separately. One reason is obvious: Women's lives are more directly affected by childbirth. Another reason is that previous research suggests the possibility of important sex differences in the development of aspirations and attitudes (e.g., Alexander and Eckland, 1974; Douvan and Gold, 1966; Klemmack and Edwards, 1973; Marini and Greenberger, 1978; Sewell and Shah, 1967 and 1968). Since the NLS is one of the few data bases providing a sufficiently large sample size to permit separate analyses for males and females, we have elected to perform separate analyses even when the results were not appreciably different.

IV. A PROFILE OF EARLY FAMILY FORMATION FOR THE CLASS OF 1972

This section presents an overview of the family formation process for the Class of 1972 based upon our study of the timing of marriage and parenthood among the NLS participants. Our methodology for assessing the consequences of early family formation depends heavily on our ability to categorize the NLS respondents into relatively homogeneous groups by sex, marital status, date of marriage, and timing of entry into parenthood. A comparison of the numbers and personal characteristics of individuals in the various categories provides a profile of early formation for the Class of 1972 and reveals the remarkable extent to which the teenage parents differed from their classmates.

DETERMINATION OF MARITAL AND PARENTHOOD STATUS

Information on the marital and parenthood status of the NLS respondents was collected on all three follow-up surveys but not on the base year survey. In each of the follow-up surveys, the respondents were asked their marital status and how many children they had as of the first week of October in the year in which the survey was taken.[1] The married respondents were also asked to give their marriage dates, but the timing of births could be determined only from changes over time in the responses to the questions on number of children.

Although response rates on each of the follow-up surveys were very high, only 84 percent of the NLS participants responded to all three follow-up surveys, and some respondents answered only a few questions. Moreover, there were numerous inconsistencies among the responses. For example, there were conflicts between marriage dates and reported marital status as well as among the marriage dates themselves. Also, some respondents who had classified themselves as married or divorced on the first follow-up survey later classified themselves as "never married." While the inconsistencies and instances of missing data were probably less prevalent in the NLS than in other panel studies that use long questionnaires to elicit detailed personal information, the NLS poses problems in establishing the pattern of family formation for some participants.

To identify the marriage date and timing of entry into parenthood as reliably as possible, we devised a procedure for combining the many relevant items on the four surveys to estimate the participants' marital and parenthood

[1]The routing instructions on the First Follow-up Questionnaire asked the single respondents to skip the question about number of children but a large number of single respondents chose to ignore the instructions and responded.

statuses as of June 1972, October 1973, October 1974, and October 1976. For the most part, the procedure used only the responses to the questions on marital status, date of marriage, and number of children. Missing values of marital status were often estimated from marriage dates reported on a later survey or from later "never married" responses. Missing values for number of children were estimated to be zero for respondents who reported having no children on later surveys. In a few cases, missing values were estimated using reported numbers of dependents (available on all four surveys), responses indicating that the respondent was living with a spouse, and responses to a question on the first follow-up survey asking whether the respondent planned to have a child before October 1974.

The estimation procedure and a FORTRAN program for carrying it out are provided in a Rand note by Blaschke et al. (1979). Table 4.1 indicates the cells of the classification scheme that was used, and the frequency count of respondents in each cell. Note that only about 10 percent of the NLS participants were classified as having "unknown" parenthood status in 1976. For the most part, these cases are nonrespondents to the third follow-up survey who either did not respond or reported having no children on earlier surveys.

Those who became parents before October 1973 are of primary interest in this study. Our procedure identified 1248 participants (887 females and 361 males) in this group, which made up 5.5 percent of the NLS sample (7.8 percent of the females, 3.2 percent of the males). With few exceptions, they became parents while still teenagers and within 16 months of their high school graduation dates. Moreover, a close analysis of this group's responses to certain items on the 1972 and 1973 surveys revealed that a sizable subgroup of these respondents *probably* were parents while still in high school.

We attempted to isolate these cases for two reasons. First, our methodology for assessing the effects of parenthood consists primarily of looking at changes over time in expectations, aspirations, and attitudes using the 1972 items as baseline measures. However, the 1972 measures of, say, educational aspirations would probably already reflect the effects of parenthood among those respondents who became parents while still in high school. Second, this group of earlier parents provides an opportunity to study the consequences of early parenthood for a special group that, unlike many school-age parents, did not drop out of high school.

This led us to create a subcategory of respondents that will be referred to as "probable parents as of June 1972." These respondents were identified using criteria that may, in fact, lead to misclassifying their timing of entry into parenthood in a few cases, but nevertheless delineate a group of early parents that merit special attention. Female parents as of October 1973 were classified as being probable parents as of June 1972 if (a) they had two or more children in October 1973, or (b) they had one child in October 1973 and either they were married before January 1972 (i.e., several months before high school graduation) or they reported having one or more dependents on the base year questionnaire. A male parent as of October 1973 was classified as a probable parent in June 1972 if (a) he had two or more children in October 1973 and he was

Table 4.1

FREQUENCY COUNTS OF NLS PARTICIPANTS BY MARITAL AND PARENTHOOD STATUS

Parenthood Status as of October 1976	Total	Marital Status 10/76			Date of First Marriage				
		Single	Ever Married	Unknown	Before 6/72	6/72-10/73	11/73-10/74	After 11/74	Unknown
FEMALES									
Nonparents	7182	4332	2822	28	94	683	618	1411	16
Parents	3123	429	2656	38	370	1394	529	351	12
Timing of First Child:									
After 10/74	1287	171	1115	1	51	445	344	272	3
11/73 to 10/74	836	147	669	20	54	442	125	47	1
Before 10/73	887	111	759	17	248	429	47	32	3
Prob. 6/72-10/73	610	66	532	12	101	375	31	23	2
Prob. before 6/72	277	45	227	5	147	54	16	9	1
Unknown	113	0	113	0	17	78	13	0	5
Unknown	1031	0	150	881	13	93	39	1	4
Total	11336	4761	5628	947	477	2170	1186	1763	32
MALES									
Nonparents	7876	5801	2045	30	10	288	429	1306	12
Parents	1948	239	1680	29	135	698	447	390	10
Timing of First Child:									
After 10/74	994	135	858	1	8	196	297	355	2
11/73 to 10/74	495	80	390	25	7	235	118	30	0
Before 10/73	361	24	334	3	107	206	14	5	2
Prob. 6/72-10/73	285	24	258	3	48	192	12	4	2
Prob. before 6/72	76	0	76	0	59	14	2	1	0
Unknown	98	0	98	0	13	61	18	0	6
Unknown	1343	0	97	1246	1	47	38	10	1
Total	11167	6040	3822	1305	146	1033	914	1706	23

married before June 1972, or (b) he had one child in October 1973 and reported two or more dependents on the base year survey, or (c) he had one child in October 1973, he did not respond to the base year question on number of dependents, and he was married before January 1972. Whether or not the title "probable parents as of June 1972" applies in all cases, these are well-defined subgroups of early parents that have been singled out for special treatment in this study.

Using the above procedure, we identified 277 females and 76 males as probable parents in June 1972. The 277 females represent almost one-third of the women who became mothers by October 1973 and 2.4 percent of all women in the NLS. The 76 males represent less than 1 percent of the males in the NLS sample but over one-fifth of the fathers who became parents by October 1973.

The NLS is not a representative sample from the Class of 1972, since schools located in low-income areas and schools with high proportions of minority students were sampled at approximately twice the sampling rate used for other schools. Accordingly, the proportions of NLS participants in various cells in Table 4.1 are biased estimates of the corresponding national proportions. However, estimates of the national proportions can be obtained by weighting the individuals in the NLS proportional to the reciprocals of their sample inclusion probabilities.[2]

Table 4.2 provides the corresponding national estimates of the cell frequencies for the estimated 3,043,600 seniors in the Class of 1972. Because of the sizable category of NLS participants for whom parenthood status was unknown in October 1976, the estimated cell counts in Table 4.2 for the parenthood categories represent underestimates of the actual counts. Assuming that the proportion of parents in the "unknown" category is about the same as it is among the other members of the Class of 1972, we estimate that approximately 29 percent of the females and 18 percent of the males in the Class of 1972 had become parents by October 1976. Approximately 11 percent of these parents remained single through October 1976.

Table 4.3 gives the analogous figures for October 1973. Assuming that the "unknown" categories can be allocated proportionately to the other categories leads to the inference that approximately 7.7 percent of the females and 3.0 percent of the males in the Class of 1972 were parents as of October 1973. These figures probably underestimate the true percentages slightly, because the routing instructions on the first follow-up questionnaire asked single persons to skip the question on number of children. Although many single parents answered the question anyway, this probably led to classifying fewer NLS respondents as parents than would otherwise have been the case. In round numbers, we estimate that 120,000 females and 50,000 males in the Class of 1972 were parents as of October 1973.

In the rest of this study, the NLS participants whose marital or parenthood

[2]See Levinsohn et al. (1978) for a detailed description of the sampling procedure and derivation of sampling probabilities. Various sets of weights are provided on the NLS file to allow for nonresponse rates in the four waves. The weights W12 were chosen for this study.

Table 4.2

ESTIMATED COUNTS OF MARITAL AND PARENTHOOD STATUS CATEGORIES FOR THE CLASS OF 1972

Parenthood Status as of October 1976	Total	Marital Status, 10/76			Date of First Marriage				
		Single	Ever Married	Unknown	Before 6/72	6/72-10/73	11/73-10/74	After 11/74	Unknown
FEMALES									
Nonparents	976707	588977	383817	3913	9833	89034	86713	196153	2115
Parents	395930	45286	347025	3619	46919	183658	67919	47011	1534
Timing of First Child:									
After 10/74	164884	18202	146625	57	5658	58299	44938	37244	498
11/73 to 10/74	103425	14667	86541	2217	6366	58724	16352	4991	112
Before 10/73	113378	12417	99616	1345	32591	56645	5268	4775	338
Prob. 6/72-10/73	80234	7751	71503	980	14472	50502	2886	3424	219
Prob. before 6/72	33144	4665	28114	365	18119	6143	2382	1351	119
Unknown	14243	0	14243	0	2305	9990	1362	0	586
Unknown	146138	0	20502	125636	1718	12709	5439	58	578
Total	1518775	634263	751345	133169	58471	285401	160071	243222	4227
MALES									
Nonparents	1107093	823975	278659	4460	1264	35388	59125	181639	1262
Parents	239973	26773	210361	2840	15768	87556	55752	50429	861
Timing of First Child:									
After 10/74	126185	15567	110453	165	983	25078	37003	47264	131
11/73 to 10/74	58810	8609	47815	2386	928	29566	14724	2598	0
Before 10/73	43407	2597	40520	289	12589	25536	1643	568	184
Prob. 6/72-10/73	34520	2597	31634	289	5724	23796	1447	483	184
Prob. before 6/72	8886	0	8886	0	6865	1740	197	85	0
Unknown	11572	0	11572	0	1268	7376	2382	0	546
Unknown	177757	0	13716	164041	206	6987	5319	1064	140
Total	1524822	850748	502735	171341	17238	129931	120196	233132	2263

Table 4.3

PARENTHOOD STATUS OF THE CLASS OF 1972 AS OF OCTOBER 1973

Parenthood Status as of October 1973	Number of NLS Participants		Estimated Number in the Class of 1972	
	Male	Female	Male	Female
Nonparents	10,375	10,073	1,425,800	1,353,900
Parents	361	887	43,400	113,400
Unknown	431	376	55,600	51,500
Total	11,167	11,336	1,524,800	1,518,800

status in October 1976 is unknown will be dropped from consideration, as will those who became parents before October 1976 but for whom the timing of parenthood is unknown. As can be seen from Table 4.1, these numbers are small. Eliminating those with unknown marital status in 1976 reduces the number of early parents in the sample from 887 females and 361 males to 870 females and 358 males. Among these 870 mothers, 193 (22 percent) were single in October 1973, and 111 (13 percent) remained single through October 1976. Among the 358 early fathers, 45 (13 percent) were single in October 1973, and 24 (7 percent) remained single through October 1976. As will be seen below, these single parents in the Class of 1972 differ markedly from the married parents in their background characteristics.

A CHARACTERIZATION OF TEENAGE MARRIAGE AND PARENTHOOD IN THE NLS

It is commonly accepted that family formation among teenagers is a ubiquitous phenomenon that knows no racial, religious, regional, or socioeconomic boundaries. On the other hand, teenage marriage and parenthood are much more common in certain subpopulations than in others. The previous section showed the prevalence of early family formation among the Class of 1972. This section considers how the patterns of family formation vary across subpopulations and attempts to characterize those members of the Class of 1972 who began their families when they were still teenagers.

Researchers have long emphasized the link between early family formation and lower socioeconomic status (SES). See, for example, Bantz and Ney (1970), Elder and Rockwell (1976), and Chilman (1979). It is contended that youth with

lower social class origins have fewer role and status satisfactions in their daily lives, and consequently are more attracted to sexual involvement and marriage to achieve more satisfying personal experiences, gain adult status, and establish their independence. Many teenage girls view marriage as a way to escape from an oppressive family situation and into a respected social status.

Recent national fertility statistics clearly establish that birth rates among teenagers are considerably higher in the South than in other regions, and somewhat lower in the Northeast. Also, teenage childbearing is much more prevalent among black teenagers than among whites.[3] National data on marital status also show that 18- and 19-year-old blacks of both sexes are less likely to be married than whites in the same age group, and teenagers of Spanish origin are considerably more likely to be married than other teenagers.[4]

The NLS provides a rich data base for examining the extent to which the early parents in the Class of 1972 differed from their classmates. In addition to such conventional demographic characteristics as age, sex, race, and region of residence, the NLS provides numerous measures of ability, scholastic performance, SES, attitudes, and aspirations.

Tables 4.4 to 4.10 provide comparisons of background factors across the various marital/parenthood categories of NLS respondents. The designations "Single" and "Ever Married" in these tables refer to the participants' marital status in October 1976. These tables exclude the NLS participants whose marital status in October 1976 was unknown, as well as those parents for whom the timing of entry into parenthood was unknown. In discussing these tables, we shall focus our attention on the "early parents," i.e., those who were parents as of October 1973. Since the average age of the early mothers was just 19.1 years in October 1973 and the average age of the fathers was 19.3 years, most of these young people became parents when they were 18 or younger.

Table 4.4 shows the racial composition of each of the marital/parenthood categories. Whereas blacks comprise only 14 percent of the NLS participants, they accounted for a much higher proportion of the early parents. Among the 870 early mothers (of whom 111 remained single through October 1976), 285 (32 percent) were black, and 80 percent of the single mothers were black. Among the 357 early fathers, 25 percent were black. Hispanic males, who comprised 4.5 percent of the male NLS participants, accounted for 9.2 percent of the early fathers. Only two of the 260 Orientals in the NLS were identified as early parents.

There are marked regional differences in the prevalence of early parenthood, as can be seen from Table 4.5. The percentages of the NLS respondents from each of the four major regions of the United States were as follows: Northeast, 20.9; North Central, 25.9; South, 35.8; and West, 17.4. A comparison of these percentages with the percentages in Table 4.5 shows that early parent-

[3]U.S. Bureau of the Census (1979b), p. 32.
[4]U.S. Bureau of the Census (1980), p. 7.

Table 4.4

Racial Distribution of NLS Respondents by Marital and Parenthood Status

Parenthood Status as of October 1976	Percent of Respondents Classified as							
	American Indian	Black	Hispanic	Oriental	White	Other	Unknown	N
SINGLE FEMALES								
Nonparents	0.8	14.5	3.5	1.8	76.9	2.5	0.1	4332
Parents	2.3	70.2	3.3	0.0	22.4	1.4	0.5	429
After 10/74	2.3	59.6	5.8	0.0	29.8	1.2	1.2	171
11/73-10/74	3.4	74.8	0.7	0.0	20.4	0.7	0.0	147
Before 10/73	0.9	80.2	2.7	0.0	13.5	2.7	0.0	111
Prob. 6/72-10/73	1.5	75.8	3.0	0.0	15.2	4.5	0.0	66
Prob. before 6/72	0.0	86.7	2.2	0.0	11.1	0.0	0.0	45
EVER MARRIED FEMALES								
Nonparents	0.7	6.4	3.7	0.5	86.4	2.2	0.1	2822
Parents	1.4	17.5	5.7	0.5	72.0	2.7	0.2	2656
After 10/74	1.4	11.2	5.2	0.5	79.1	2.4	0.1	1115
11/73-10/74	1.2	18.7	7.9	0.7	67.1	4.0	0.3	669
Before 10/73	1.7	25.8	4.6	0.3	65.6	1.8	0.1	759
Prob. 6/72-10/73	1.7	21.6	3.9	0.2	70.5	1.9	0.2	532
Prob. before 6/72	1.8	35.7	6.2	0.4	54.2	1.8	0.0	227
SINGLE MALES								
Nonparents	0.9	9.8	3.7	2.0	81.0	2.3	0.3	5801
Parents	1.7	64.0	3.3	0.0	28.9	2.1	0.0	239
After 10/74	2.2	62.2	4.4	0.0	29.6	1.5	0.0	135
11/73-10/74	1.2	66.2	1.2	0.0	30.0	1.2	0.0	80
Before 10/73	0.0	66.7	4.2	0.0	20.8	8.3	0.0	24
EVER MARRIED MALES								
Nonparents	1.0	5.6	4.3	0.3	85.9	2.6	0.3	2045
Parents	2.1	17.6	6.7	0.5	69.6	3.2	0.3	1680
After 10/74	1.5	13.3	5.8	0.5	75.1	3.5	0.3	858
11/73-10/74	2.1	23.1	6.4	0.8	66.2	1.5	0.0	390
Before 10/73	2.4	21.9	9.6	0.0	62.0	3.9	0.3	334
Prob. 6/72-10/73	2.7	21.7	9.3	0.0	63.6	2.3	0.4	258
Prob. before 6/72	1.3	22.4	10.5	0.0	56.6	9.2	0.0	76

Table 4.5

Regional Distribution of NLS Respondents by Marital and Parenthood Status

Parenthood Status as of October 1976	Percent Within Region				N
	Northeast	North Central	South	West	
SINGLE FEMALES					
Nonparents	27.0	25.5	30.8	16.7	4332
Parents	16.6	19.3	50.3	13.8	429
After 10/74	15.8	22.2	45.0	17.0	171
11/73-10/74	15.6	17.7	54.4	12.2	147
Before 10/73	18.9	17.1	53.2	10.8	111
Prob. 6/72-10/73	15.2	21.2	53.0	10.6	66
Prob. before 6/72	24.4	11.1	53.3	11.1	45
EVER MARRIED FEMALES					
Nonparents	18.4	26.4	38.9	16.3	2822
Parents	14.7	25.3	44.1	15.9	2656
After 10/74	14.4	25.7	43.0	17.0	1115
11/73-10/74	16.9	23.9	42.3	16.9	669
Before 10/73	14.1	26.0	46.6	13.3	759
Prob. 6/72-10/73	15.0	25.9	46.1	13.0	532
Prob. before 6/72	11.9	26.0	48.0	14.1	227
SINGLE MALES					
Nonparents	23.6	27.3	30.2	18.9	5801
Parents	17.2	18.4	50.6	13.8	239
After 10/74	21.5	20.0	45.2	13.3	135
11/73-10/74	12.5	17.5	56.2	13.7	80
Before 10/73	8.3	12.5	62.5	16.7	24
EVER MARRIED MALES					
Nonparents	14.9	28.6	40.2	16.3	2045
Parents	12.6	24.0	47.1	16.3	1680
After 10/74	11.8	24.0	48.4	15.9	858
11/73-10/74	12.6	23.8	46.2	17.4	390
Before 10/73	14.1	23.7	45.2	17.1	334
Prob. 6/72-10/73	12.8	24.8	46.1	16.3	258
Prob. before 6/72	18.4	19.7	42.1	19.7	76

Table 4.6

Religious Affiliations of NLS Respondents by Marital and Parenthood Status

Parenthood Status as of October 1976	Percent of Respondents Classified as							
	Protestant	Catholic	Other Christian	Jewish	Other	None	Unknown	N
SINGLE FEMALES								
Nonparents	38.6	30.4	12.7	3.7	3.3	3.6	7.7	4332
Parents	30.3	15.2	29.6	0.0	9.6	5.8	9.6	429
After 10/74	32.2	18.7	24.6	0.0	8.8	5.8	9.9	171
11/73-10/74	29.9	12.9	30.6	0.0	12.2	6.1	8.2	147
Before 10/73	27.9	12.6	36.0	0.0	7.2	5.4	10.8	111
Prob. 6/72-10/73	28.8	9.1	37.9	0.0	4.5	6.1	13.6	66
Prob. before 6/72	26.7	17.8	33.3	0.0	11.1	4.4	6.7	45
EVER MARRIED FEMALES								
Nonparents	44.1	26.4	14.6	1.2	2.8	3.1	7.9	2822
Parents	38.6	23.7	20.2	0.1	5.2	3.8	8.4	2656
After 10/74	39.5	26.4	18.5	0.3	4.4	3.0	8.1	1115
11/73-10/74	37.8	23.9	20.5	0.0	6.6	3.9	7.3	669
Before 10/73	40.6	20.6	22.8	0.0	5.5	4.6	5.9	759
Prob. 6/72-10/73	43.8	22.4	19.0	0.0	4.3	4.7	5.8	532
Prob. before 6/72	33.0	16.3	31.7	0.0	8.4	4.4	6.2	227
SINGLE MALES								
Nonparents	34.8	30.4	13.8	3.1	3.1	5.6	9.3	5801
Parents	31.0	14.2	23.0	0.8	6.3	10.9	13.8	239
After 10/74	31.1	15.6	23.0	0.7	8.1	8.9	12.6	135
11/73-10/74	32.5	11.2	20.0	1.2	5.0	13.7	16.2	80
Before 10/73	25.0	16.7	33.3	0.0	0.0	12.5	12.5	24
EVER MARRIED MALES								
Nonparents	37.9	24.7	17.8	0.8	3.6	5.2	9.9	2045
Parents	33.4	20.6	23.2	0.4	4.7	6.9	10.8	1680
After 10/74	35.0	21.0	21.7	0.5	4.9	7.3	9.7	858
11/73-10/74	32.8	18.2	25.9	0.0	4.9	6.4	11.8	390
Before 10/73	32.9	22.5	25.1	0.6	3.6	6.6	8.7	334
Prob. 6/72-10/73	35.3	20.5	22.1	0.8	3.9	7.8	9.7	258
Prob. before 6/72	25.0	28.9	35.5	0.0	2.6	2.6	5.3	76

Table 4.7

Academic Ability of NLS Respondents by Marital and Parenthood Status

Parenthood Status as of October 1976	Percent by Ability Level			N
	Low	Medium	High	
SINGLE FEMALES				
Nonparents	21.1	43.3	35.7	3130
Parents	64.6	29.9	5.6	268
After 10/74	66.3	28.7	5.0	101
11/73-10/74	57.0	36.0	7.0	100
Before 10/73	73.1	22.4	4.5	67
Prob. 6/72-10/73	77.8	14.8	7.4	27
Prob. before 6/72	70.0	27.5	2.5	40
EVER MARRIED FEMALES				
Nonparents	24.0	50.4	25.6	2020
Parents	40.9	45.4	13.7	1787
After 10/74	34.5	48.6	16.8	773
11/73-10/74	46.0	43.3	10.7	457
Before 10/73	45.6	42.9	11.5	496
Prob. 6/72-10/73	42.3	43.8	13.9	324
Prob. before 6/72	51.7	41.3	7.0	172
SINGLE MALES				
Nonparents	22.8	43.5	33.7	4133
Parents	60.5	30.2	9.3	162
After 10/74	60.6	31.9	7.4	94
11/73-10/74	59.6	26.9	13.5	52
Before 10/73	62.5	31.2	6.2	16
EVER MARRIED MALES				
Nonparents	30.2	46.4	23.4	1495
Parents	46.9	42.7	10.4	1155
After 10/74	43.6	44.2	12.2	597
11/73-10/74	47.7	42.7	9.5	262
Before 10/73	51.8	40.7	7.5	226
Prob. 6/72-10/73	49.7	41.3	9.0	167
Prob. before 6/72	57.6	39.0	3.4	59

Table 4.8

Percentile Rank in Class of NLS Respondents by Marital and Parenthood Status

Parenthood Status as of October 1976	Percent by Rank in Class				N
	0-25	26-50	51-75	76-100	
SINGLE FEMALES					
Nonparents	11.4	18.3	27.2	43.2	3324
Parents	28.9	29.2	27.1	14.8	277
After 10/74	30.0	26.4	28.2	15.5	110
11/73-10/74	23.7	29.9	29.9	16.5	97
Before 10/73	34.3	32.9	21.4	11.4	70
Prob. 6/72-10/73	34.2	36.8	15.8	13.2	38
Prob. before 6/72	34.4	28.1	28.1	9.4	32
EVER MARRIED FEMALES					
Nonparents	11.4	19.9	31.0	37.6	2161
Parents	19.6	27.5	29.9	23.0	1884
After 10/74	15.4	26.0	31.5	27.1	807
11/73-10/74	24.2	26.0	29.6	20.2	480
Before 10/73	20.8	31.0	28.0	20.2	529
Prob. 6/72-10/73	21.7	29.0	28.4	20.9	359
Prob. before 6/72	18.8	35.3	27.1	18.8	170
SINGLE MALES					
Nonparents	21.4	26.8	26.3	25.5	4448
Parents	36.7	30.1	23.5	9.6	166
After 10/74	36.1	30.9	24.7	8.2	97
11/73-10/74	32.7	34.6	19.2	13.5	52
Before 10/73	52.9	11.8	29.4	5.9	17
EVER MARRIED MALES					
Nonparents	25.8	29.7	25.1	19.3	1568
Parents	36.9	31.3	22.9	8.9	1195
After 10/74	34.8	29.9	23.9	11.3	618
11/73-10/74	36.9	34.7	22.5	5.9	271
Before 10/73	40.9	32.3	20.4	6.4	235
Prob. 6/72-10/73	39.4	31.4	21.7	7.4	175
Prob. before 6/72	45.0	35.0	16.7	3.3	60

Table 4.9

High School Programs of NLS Respondents by Marital and Parenthood Status

Parenthood Status as of October 1976	Percent by Program			
	General	Academic	Vocational technical	N
SINGLE FEMALES				
Nonparents	28.1	52.4	19.5	4329
Parents	42.0	20.7	37.3	429
After 10/74	43.3	22.2	34.5	171
11/73-10/74	35.4	23.8	40.8	147
Before 10/73	48.6	14.4	36.9	111
Prob. 6/72-10/73	47.0	16.7	36.4	66
Prob. before 6/72	51.1	11.1	37.8	45
EVER MARRIED FEMALES				
Nonparents	34.2	36.1	29.8	2820
Parents	43.7	19.4	36.9	2654
After 10/74	41.3	23.0	35.8	1115
11/73-10/74	44.7	16.6	38.7	669
Before 10/73	44.7	17.7	37.6	758
Prob. 6/72-10/73	43.8	18.2	38.0	532
Prob. before 6/72	46.9	16.4	36.7	226
SINGLE MALES				
Nonparents	32.4	51.3	16.3	5797
Parents	50.6	23.4	25.9	239
After 10/74	49.6	23.7	26.7	135
11/73-10/74	47.5	27.5	25.0	80
Before 10/73	66.7	8.3	25.0	24
EVER MARRIED MALES				
Nonparents	39.5	38.9	21.6	2044
Parents	47.3	21.3	31.4	1679
After 10/74	44.1	24.5	31.4	857
11/73-10/74	51.8	17.2	31.0	390
Before 10/73	49.7	18.9	31.4	334
Prob. 6/72-10/73	50.0	20.2	29.8	258
Prob. before 6/72	48.7	14.5	36.8	76

Table 4.10

Socioeconomic Status of NLS Respondents by Marital and Parenthood Status

Parenthood Status as of October 1976	Percent by SES			N
	Low	Medium	High	
SINGLE FEMALES				
Nonparents	22.2	47.6	30.3	4304
Parents	64.1	30.6	5.2	421
After 10/74	62.1	32.5	5.3	169
11/73-10/74	61.0	34.0	5.0	141
Before 10/73	71.2	23.4	5.4	111
Prob. 6/72-10/73	71.2	22.7	6.1	66
Prob. before 6/72	71.1	24.4	4.4	45
EVER MARRIED FEMALES				
Nonparents	25.7	52.4	21.9	2804
Parents	44.6	46.3	9.1	2630
After 10/74	38.6	50.8	10.6	1109
11/73-10/74	48.3	42.2	9.5	666
Before 10/73	50.1	43.1	6.7	756
Prob. 6/72-10/73	46.8	46.0	7.2	530
Prob. before 6/72	58.0	36.3	5.8	226
SINGLE MALES				
Nonparents	21.2	47.2	31.7	5746
Parents	49.8	39.5	10.7	233
After 10/74	50.8	39.4	9.8	132
11/73-10/74	48.1	40.3	11.7	77
Before 10/73	50.0	37.5	12.5	24
EVER MARRIED MALES				
Nonparents	25.2	53.4	21.4	2026
Parents	42.6	47.5	9.9	1659
After 10/74	38.2	49.8	12.0	849
11/73-10/74	48.7	43.3	8.0	388
Before 10/73	44.7	48.0	7.2	333
Prob. 6/72-10/73	42.2	50.0	7.8	258
Prob. before 6/72	53.3	41.3	5.3	75

hood among the NLS participants was much more prevalent in the South than in other regions, and somewhat less prevalent in the Northeast and West.

Table 4.6 permits comparisons of the religious affiliations of the early parents with the nonparents. The table shows that Catholics and Jews were underrepresented among the early parents, while the group of "other Christians" was overrepresented. The percentages of all NLS participants by religious affiliation were as follows: Protestant, 36.6; Catholic, 26.9; other Christian, 16.1; Jewish, 2.1; other, 3.7; none, 4.9; unknown, 9.8.

The ability levels in Table 4.7 were defined in terms of the ability composite score, ABLE, defined in Sec. III. Among the NLS participants for whom ability scores were available, the percentages within the three categories (low, medium, and high) were 30.2, 44.2, and 25.6. More than half of the early parents of both sexes were in the low-ability group, as were almost three-fourths of the single women who became mothers before October 1973.

Given these differences in ability, it is not surprising that the early parents were more likely to rank lower than their classmates in academic performance, as can be seen from Table 4.8. A discriminant analysis, not reported here, indicates that rank in class is a much better predictor of early parenthood among females than the ability measure. This may suggest that the early mothers who ranked low among their classmates in scholastic performance were more attracted to sexual involvement, marriage, and motherhood as a means of gaining social status among their peers.

From Table 4.9, we see that the early parents were primarily in general and vocational-technical programs, not in academic (college preparatory) programs. Among all female NLS participants, the percentages within the general, academic, and vocational-technical tracks were 34.7, 37.4, and 27.9. The corresponding percentages for males were 37.7, 41.8, and 20.5. As Table 4.9 indicates, early parenthood was much less prevalent among those in college preparatory programs.

Table 4.10 shows that early parenthood is much more prevalent in families of lower SES. Here, the measure of SES is the created variable "SES" on the NLS data file. See Levinsohn et al. (1978) for a description. The overall percentages of NLS participants in the low, medium, and high SES groups were 29.1, 48.0, and 22.9.

Instead of using an aggregate SES measure, we shall use the individual measures listed previously in Table 3.3. The means of these measures for each of the marital/parenthood categories, as well as the means for the other background factors, are reported in Appendix C. A comparison of these means makes it apparent that, for the most part, the early parents were below-average students in nonacademic programs who came from families of lower SES. As we shall see, their educational and career aspirations were markedly lower than those of their classmates, and it may have been this lack of direction in their lives that led many of them to marry and become parents long before their classmates.

The NLS participants who married early but who remained childless through 1976 tend to rank between the single nonparents and the early parents

in ability, scholastic performance, and SES. In ability and class rank, the married nonparents were close to the single nonparents. However, a much smaller proportion of the married nonparents were in academic programs, indicating that most had rather limited educational aspirations even before they married.

In summary, the NLS participants who started their families while still teenagers differed in many ways from those who remained single and childless through 1976. On average, those who married early ranked low among their classmates in academic ability, scholastic performance, and SES. The early parents in the NLS ranked even lower. Given the backgrounds of the early parents, their chances for college degrees or professional careers would have been poor whether or not their lives had become complicated by early parenthood.

V. PLANS AND REALIZATIONS

POSTSECONDARY PLANS OF THE NLS PARTICIPANTS

On the base year survey, the NLS participants were asked, "What is the one thing that will take the largest share of your time in the year after you leave high school?" The responses to this item provide an important benchmark measure of individual plans uncomplicated by subsequent family-related events. The distributions of responses to this question, given in Table 5.1, demonstrate how different the early parents were in terms of their postsecondary plans. It should be recalled that, with the exception of the "probable parents before June 1972," most of the early parents were neither married nor parents at the time they answered this question. The differences between the parents and nonparents observed here, then, must be attributed primarily to factors other than parenthood, such as ability and socioeconomic status (SES).

Among the single nonparents in 1976, three-fourths of the women and two-thirds of the men had planned, as seniors, to attend college the following year. For most of them, "college" meant a university or four-year college. Only about a third of the "early parents" (those who became parents before October 1973) had planned to attend college, and this typically meant a two-year college or vocational-technical school. Overall, one-fourth of the early mothers planned to become homemakers the year after graduation; most of the early fathers planned to enter the civilian labor force or enlist in the military.

While it is commonly assumed that early parenthood severely handicaps young people because it disrupts their educational plans, these data reveal that most of the NLS participants who became early parents did not plan to enter college anyway. Moreover, the fact that they were not in the "college-going crowd" as seniors may, in fact, have fostered social relationships conducive to early involvement in family formation. That is, instead of early family formation causing reduced educational aspirations, those individuals whose aspirations were not linked to further education may have sought to achieve their goals through activities leading to early family formation.

This is not to say that early parenthood never interferes with educational plans. As will be seen below, there is considerable evidence in the NLS of such interference. However, the sizable preexisting differences revealed in Table 5.1 alert us to the dangers of drawing generalizations based on stereotypes. Parenthood does not always interfere with educational plans because many of those who later became parents had other plans to begin with.

THE REALIZATION OF POSTSECONDARY PLANS

To determine the extent to which marriage and parenthood interfered with postsecondary plans, we have attempted to compare the NLS participants' high

Table 5.1

Postsecondary Plans of NLS Respondents as of 1972 by Marital and Parenthood Status

Parenthood Status as of October 1976	Percent by Postsecondary Plans								
	College			Labor force					
	4-year	2-year	Voc-tech	Full-time	Part-time	Military	Homemaker	Other	N
SINGLE FEMALES									
Nonparents	47.4	17.5	8.7	19.2	1.5	0.8	0.6	4.3	3288
Parents	20.4	11.4	14.5	41.5	2.1	1.0	3.5	5.5	289
After 10/74	23.6	9.1	14.5	41.8	2.7	2.7	0.9	4.5	110
11/73-10/74	22.6	9.4	15.1	42.5	1.9	0.0	2.8	5.7	106
Before 10/73	12.3	17.8	13.7	39.7	1.4	0.0	8.2	6.8	73
Prob. 6/72-10/73	9.4	15.6	21.9	43.7	3.1	0.0	0.0	6.2	32
Prob. before 6/72	14.6	19.5	7.3	36.6	0.0	0.0	14.6	7.3	41
EVER MARRIED FEMALES									
Nonparents	28.7	18.5	11.8	29.1	2.1	0.8	4.3	4.8	2104
Parents	12.4	10.6	13.0	37.6	3.6	1.0	16.3	5.3	1873
After 10/74	15.9	13.8	13.5	37.8	3.6	1.2	8.6	5.6	805
11/73-10/74	9.9	8.6	13.9	42.4	3.2	1.3	13.9	6.8	474
Before 10/73	10.5	7.2	11.2	33.3	4.2	0.4	29.0	4.2	525
Prob. 6/72-10/73	11.4	7.6	11.7	32.0	3.2	0.6	29.0	4.4	341
Prob. before 6/72	8.7	6.5	10.3	35.9	6.0	0.0	28.8	3.8	184
SINGLE MALES									
Nonparents	42.3	18.0	6.8	18.8	1.6	4.8	-	7.8	4322
Parents	27.2	12.4	6.5	28.4	3.0	11.8	-	10.7	169
After 10/74	30.6	13.3	2.0	29.6	1.0	9.2	-	14.3	98
11/73-10/74	16.4	12.7	14.5	27.3	5.5	16.4	-	7.3	55
Before 10/73	43.7	6.2	6.2	25.0	6.2	12.5	-	0.0	16
EVER MARRIED MALES									
Nonparents	28.9	17.0	8.4	27.4	1.9	6.7	-	9.6	1549
Parents	13.7	9.7	10.4	45.1	1.7	9.1	-	10.4	1197
After 10/74	16.0	12.7	11.3	40.3	1.8	7.9	-	10.0	620
11/73-10/74	10.8	8.2	10.8	44.2	1.9	11.9	-	12.3	269
Before 10/73	12.0	3.0	6.4	57.9	1.7	8.6	-	10.3	233
Prob. 6/72-10/73	13.8	2.9	5.7	55.7	1.7	9.8	-	10.3	174
Prob. before 6/72	6.8	3.4	8.5	64.4	1.7	5.1	-	10.2	59

school plans with what they actually did during the year after graduation. Tables 5.2, 5.3, and 5.4 give the distributions of their main activities by marital/parenthood category in October of 1972, 1973, and 1976.

Ignoring questions about the comparability of Tables 5.1 and 5.2 for the moment, we observe that, among the single nonparents in 1976, there is a close match between the distribution of plans reported in high school and the corresponding distribution in Table 5.2. As high school seniors, for example, about one-fifth of the single females planned to take full-time jobs; in October 1972, about one-fifth had done so. (An exception to this rule is that 26.3 percent of the men were employed full time in October 1972, whereas only 18.8 percent of the male seniors had planned on being so.) This near matching of the distributions of plans and realizations suggests that, for the most part, the single nonparents were able to carry out their high school plans.

The same cannot be said for the early parents. Whereas 11 percent of the early mothers had planned to attend four-year colleges, only 3.5 percent were doing so in the fall of 1972. From a comparison of Tables 5.1 and 5.2, it is apparent that many early mothers who had planned to work or attend college the year after completing high school changed their plans when they became pregnant. In the fall of 1972 they listed themselves as homemakers or unemployed instead of students or workers. Some of the early fathers who had planned to enter college took full-time jobs instead, presumably to support their families.

Comparisons between Tables 5.1 and 5.2 to determine deviations from plans are somewhat questionable, because the "main activity" in October 1972 cannot be determined from the survey responses in a completely straightforward fashion. The procedure that we adopted for classifying the NLS participants by main activity, described in Kanouse et al. (1980), depends upon the responses to several questions on the first follow-up survey. In many cases, the procedure did not lead to assigning an individual to a single main activity. Table 5.2 is restricted to those NLS participants whose main activities could be classified with near certainty, and the resulting omission of questionable cases may distort the overall pattern somewhat.

In comparing Tables 5.1 and 5.2, the reader should also keep in mind that different subsets of NLS participants are being compared at different points in time. All usable responses for each wave of the survey are incorporated into our analysis. Thus, the 3288 female single nonparents whose plans are reported in Table 5.1 are not a subset of the 4036 females whose activities are reported in Table 5.2, though most of 3288 females in the base year survey also participated in the follow-up survey. The main reason for the change in sample sizes between 1972 and 1973 is that the NLS sample was increased by over 20 percent between the base year and first follow-up survey.

There is less cause for concern about the comparability of Tables 5.2 and 5.3, since both are derived from responses to the first follow-up survey. A comparison of these tables shows that the differences between the early parents and the nonparents became even more pronounced in October 1973 than they were in 1972. Whereas most of the single nonparents continued to attend

Table 5.2

Main Activities of the NLS Respondents as of October 1972 by Marital and Parenthood Status

Parenthood Status as of October 1976	Percent of Respondents by Main Activity in October 1972								
	Full-time student			Labor force					
	4-year	2-year	Voc-tech	Full-time	Part-time	Military	Homemaker	Unemployed	N
SINGLE FEMALES									
Nonparents	45.2	16.1	7.6	19.4	4.4	0.2	0.4	6.6	4036
Parents	13.2	10.7	12.1	27.4	6.6	0.0	9.3	20.8	365
After 10/74	17.1	9.6	10.3	31.5	9.6	0.0	3.4	18.5	146
11/73-10/74	17.2	12.3	13.1	19.7	3.3	0.0	11.5	23.0	122
Before 10/73	2.1	10.3	13.4	30.9	6.2	0.0	15.5	21.6	97
Prob. 6/72-10/73	1.7	10.2	13.6	37.3	3.4	0.0	10.2	23.7	59
Prob. before 6/72	2.6	10.5	13.2	21.1	10.5	0.0	23.7	18.4	38
EVER MARRIED FEMALES									
Nonparents	26.9	13.8	9.9	32.4	7.1	0.1	3.1	6.7	2646
Parents	8.6	6.3	8.0	38.5	7.5	0.4	17.5	13.2	2507
After 10/74	12.7	9.7	10.0	42.1	7.5	0.5	7.1	10.5	1042
11/73-10/74	8.2	4.7	7.9	41.2	9.3	0.5	13.0	15.2	645
Before 10/73	3.7	3.1	5.4	30.4	6.4	0.1	35.5	15.4	736
Prob. 6/72-10/73	4.7	3.3	5.2	29.1	6.8	0.2	34.5	16.3	516
Prob. before 6/72	1.4	2.7	5.9	33.6	5.5	0.0	37.7	13.2	220
SINGLE MALES									
Nonparents	39.7	15.9	4.9	26.3	3.8	3.8	0.0	5.6	5363
Parents	20.0	10.5	7.1	36.7	9.5	6.7	0.0	9.5	210
After 10/74	21.2	8.5	10.2	29.7	9.3	9.3	0.0	11.9	118
11/73-10/74	13.2	17.6	2.9	44.1	10.3	4.4	0.0	7.4	68
Before 10/73	33.3	0.0	4.2	50.0	8.3	0.0	0.0	4.2	24
EVER MARRIED MALES									
Nonparents	27.5	14.5	5.9	39.5	4.2	4.5	0.0	4.0	1922
Parents	10.1	8.6	5.0	56.4	5.8	7.4	0.0	6.7	1589
After 10/74	12.0	12.1	6.5	51.4	5.2	6.7	0.0	6.2	794
11/73-10/74	8.6	6.3	2.0	58.9	7.3	8.1	0.0	8.8	397
Before 10/73	8.4	4.1	5.0	63.4	5.0	9.1	0.0	5.0	320
Prob. 6/72-10/73	8.8	5.2	4.8	61.8	4.4	10.0	0.0	5.2	251
Prob. before 6/72	7.2	0.0	5.8	69.6	7.2	5.8	0.0	4.3	69

Table 5.3

Main Activities of the NLS Respondents as of October 1973 by Marital and Parenthood Status

Parenthood Status as of October 1976	Percent of Respondents by Main Activity in October 1973								
	Full-time student			Labor force					
	4-year	2-year	Voc-tech	Full-time	Part-time	Military	Homemaker	Unemployed	N
SINGLE FEMALES									
Nonparents	42.6	13.2	4.7	28.8	3.9	0.6	0.4	5.7	4076
Parents	10.7	8.7	6.6	36.4	5.1	0.3	10.7	21.6	393
After 10/74	12.7	12.1	5.1	45.2	7.0	0.0	3.2	14.6	157
11/73-10/74	13.2	9.3	7.0	26.4	2.3	0.8	13.2	27.9	129
Before 10/73	4.7	2.8	8.4	35.5	5.6	0.0	18.7	24.3	107
Prob. 6/72-10/73	4.7	1.6	9.4	35.9	6.2	0.0	14.1	28.1	64
Prob. before 6/72	4.7	4.7	7.0	34.9	4.7	0.0	25.6	18.6	43
EVER MARRIED FEMALES									
Nonparents	20.8	9.8	4.8	47.0	6.3	0.7	5.5	5.3	2713
Parents	4.7	3.5	2.9	41.9	7.0	0.6	29.9	9.5	2588
After 10/74	8.3	5.9	4.8	53.0	7.4	1.1	13.0	6.5	1073
11/73-10/74	3.3	2.0	2.4	38.9	7.4	0.3	32.8	13.0	664
Before 10/73	1.3	1.7	0.9	29.1	6.5	0.0	50.5	10.0	767
Prob. 6/72-10/73	0.7	1.5	1.1	26.1	7.6	0.0	53.8	9.1	537
Prob. before 6/72	2.6	2.2	0.4	36.1	3.9	0.0	42.6	12.2	230
SINGLE MALES									
Nonparents	35.9	13.2	3.7	32.9	2.9	6.3	0.0	5.0	5453
Parents	17.5	6.1	2.4	48.6	5.2	9.9	0.0	10.4	212
After 10/74	18.3	5.0	2.5	44.2	7.5	11.7	0.0	10.8	120
11/73-10/74	14.5	10.1	2.9	50.7	1.4	8.7	0.0	11.6	69
Before 10/73	21.7	0.0	0.0	65.2	4.3	4.3	0.0	4.3	23
EVER MARRIED MALES									
Nonparents	22.4	10.8	4.4	50.4	2.6	6.5	0.0	3.0	1940
Parents	5.9	4.4	3.1	68.4	2.5	11.3	0.0	4.3	1632
After 10/74	8.4	6.5	4.1	63.9	3.0	9.6	0.0	4.6	812
11/73-10/74	4.4	2.7	1.5	70.0	2.5	14.3	0.0	4.7	406
Before 10/73	2.7	2.1	3.6	76.6	1.2	10.8	0.0	3.0	333
Prob. 6/72-10/73	3.1	2.7	3.1	74.0	1.2	12.0	0.0	3.9	258
Prob. before 6/72	1.3	0.0	5.3	85.3	1.3	6.7	0.0	0.0	75

Table 5.4

Main Activities of the NLS Respondents as of October 1976 by Marital and Parenthood Status

Parenthood Status as of October 1976	Percent of Respondents by Main Activity in October 1976								
	Full-time student			Labor force					
	4-year	2-year	Voc-tech	Full-time	Part-time	Military	Homemaker	Unemployed	N
SINGLE FEMALES									
Nonparents	20.7	2.4	1.5	60.0	6.1	1.0	1.4	6.9	4124
Parents	9.8	4.1	3.1	45.1	3.6	0.0	23.4	11.0	419
After 10/74	7.8	2.4	1.8	43.4	4.8	0.0	24.1	15.7	166
11/73-10/74	12.7	3.5	4.9	46.5	2.1	0.0	21.1	9.2	142
Before 10/73	9.0	7.2	2.7	45.9	3.6	0.0	25.2	6.3	111
Prob. 6/72-10/73	9.1	7.6	1.5	51.5	3.0	0.0	22.7	4.5	66
Prob. before 6/72	8.9	6.7	4.4	37.8	4.4	0.0	28.9	8.9	45
EVER MARRIED FEMALES									
Nonparents	6.3	1.2	0.6	65.6	1.8	1.3	20.5	2.7	2828
Parents	1.6	1.1	0.7	33.4	1.1	0.4	59.4	2.2	2552
After 10/74	1.5	0.5	0.3	29.1	0.8	0.5	65.3	2.1	1111
11/73-10/74	1.8	0.6	1.0	36.4	0.8	0.5	57.0	1.9	618
Before 10/73	1.8	2.5	1.4	37.7	1.8	0.1	52.2	2.4	714
Prob. 6/72-10/73	1.4	2.2	0.8	36.8	1.4	0.2	55.7	1.6	506
Prob. before 6/72	2.9	3.4	2.9	39.9	2.9	0.0	43.7	4.3	208
SINGLE MALES									
Nonparents	24.3	2.4	1.2	54.3	3.9	5.9	0.0	8.0	5574
Parents	9.1	3.0	1.3	61.5	5.2	6.1	0.0	13.9	231
After 10/74	7.7	3.1	0.8	63.1	6.2	6.2	0.0	13.1	130
11/73-10/74	10.4	2.6	0.0	63.6	5.2	7.8	0.0	10.4	77
Before 10/73	12.5	4.2	8.3	45.8	0.0	0.0	0.0	29.2	24
EVER MARRIED MALES									
Nonparents	11.3	1.0	1.2	74.2	1.5	7.3	0.0	3.4	2029
Parents	2.6	1.1	1.2	77.9	1.7	11.9	0.0	3.7	1600
After 10/74	2.7	0.9	1.5	79.2	1.8	11.1	0.0	2.8	849
11/73-10/74	1.7	1.4	0.6	76.6	1.9	13.9	0.0	3.9	359
Before 10/73	3.0	1.0	1.0	76.5	1.3	11.6	0.0	5.6	302
Prob. 6/72-10/73	3.4	1.3	1.3	76.5	1.3	12.0	0.0	4.3	234
Prob. before 6/72	1.5	0.0	0.0	76.5	1.5	10.3	0.0	10.3	68

college, only a small proportion of the early parents were doing so. The majority of the early mothers classified themselves as homemakers or unemployed in October 1973. Almost 90 percent of the early fathers were either in the civilian labor force or in the military service.

Table 5.4 shows the distribution of main activities of the NLS participants in October 1976. Over one-fourth of the single nonparents were still full-time students at this time, most of them in four-year institutions. Among the ever married women, the activities of the mothers contrasted sharply with those of the nonmothers; most nonmothers were employed full time, while most mothers were homemakers. Among the ever married males, there is a clearcut relationship between the timing of parenthood and unemployment rates. The earlier the man became a parent, the more likely he was to be unemployed.

EDUCATIONAL PLANS AND PATTERNS

Table 5.5 gives a better indication of the extent to which marriage and parenthood affect short-term educational plans. By comparing the changes in educational plans with the corresponding changes in marital or parenthood status, one can see when the changes in college plans actually took place. This table includes a section headed "Timing of First Marriage" that allows comparisons between ever married parents and nonparents who were married at about the same time.

For the most part, there is no clear indication in Table 5.5 of a sharp drop in plans to attend college associated with the timing of parenthood. An exception is the one between 1972 and 1973 for the mothers who married between June 1972 and October 1973. This drop from 33.3 to 19.7 percent was not matched by a corresponding drop among the married nonparents. (Unfortunately, the wording of the survey questions on plans changed between successive waves, so that year-to-year comparisons may be slightly distorted.)

Table 5.6 provides similar comparisons of the marital/parenthood categories in terms of the percentages of respondents who were actually taking courses as of the first week in October in the years 1972, 1973, 1974, and 1976. There is evidence of a substantial drop in college entrance rates during the year after marriage among both males and females, but there is little evidence in this table that the drop is more pronounced for the early parents than it is for the nonparents. If parenthood disrupts educational plans, the signs of such disruption are not immediately apparent from these comparisons. There are sizable differences, to be sure, in the college attendance rates between the parents and nonparents (whether one restricts attention to the married respondents or not). It should be recalled, however, that sizable differences in background factors are also to be considered.

By comparing Tables 5.5 and 5.6, one can assess the extent to which short-term educational plans were being realized from 1972 to 1976. With a few exceptions that appear to be related to the timing of marriage, there is a general

Table 5.5

Percentages of Respondents Planning To Attend College the Following Year by Marital and Parenthood Status

Parenthood Status as of October 1976	Percentage				Sample Sizes			
	1972	1973	1974	1976	1972	1973	1974	1976
SINGLE FEMALES								
Nonparents	73.7	70.6	66.5	35.9	3288	4194	4255	4273
Parents	46.4	51.7	48.5	42.1	289	406	423	411
After 10/74	47.3	55.8	45.2	37.9	110	163	168	169
11/73-10/74	47.2	46.2	51.4	43.1	106	132	146	137
Before 10/73	43.8	52.3	49.5	47.6	73	111	109	105
Prob. 6/72-10/73	46.9	50.0	46.9	40.6	32	66	64	64
Prob. before 6/72	41.5	55.6	53.3	58.5	41	45	45	41
EVER MARRIED FEMALES								
Nonparents	59.0	48.1	39.7	22.0	2104	2737	2778	2784
Parents	36.1	26.1	22.1	18.5	1873	2570	2587	2524
After 10/74	43.2	30.5	21.3	16.3	805	1086	1101	1092
11/73-10/74	32.5	23.5	21.9	21.1	474	650	649	612
Before 10/73	29.0	23.4	24.5	19.5	525	755	727	713
Prob. 6/72-10/73	30.8	21.1	23.9	17.6	341	530	511	507
Prob. before 6/72	25.5	28.9	25.9	24.3	184	225	216	206
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	69.5	59.1	47.2	22.2	1073	1364	1389	1393
Parents	49.4	47.9	36.8	22.7	241	340	345	344
11/73 to 10/74								
Nonparents	62.2	41.2	31.8	18.6	444	607	611	609
Parents	46.1	31.0	18.0	18.4	397	510	518	505
6/72 to 10/73								
Nonparents	39.5	34.3	32.3	24.1	512	661	672	675
Parents	33.3	19.7	20.3	17.8	987	1348	1357	1317
Before 6/72								
Nonparents	20.6	33.7	32.6	27.5	63	89	92	91
Parents	16.9	22.2	20.8	17.0	242	361	356	348
SINGLE MALES								
Nonparents	67.0	69.7	66.1	39.4	4321	5549	5626	5670
Parents	46.4	58.3	55.1	33.0	168	216	227	233
After 10/74	46.4	54.5	54.8	30.1	97	123	124	133
11/73-10/74	43.6	63.8	57.5	32.5	55	69	80	77
Before 10/73	56.3	62.5	47.8	52.2	16	24	23	23
EVER MARRIED MALES								
Nonparents	54.3	53.9	46.4	29.3	1549	1931	1987	2015
Parents	33.8	35.9	30.6	21.9	1197	1606	1603	1586
After 10/74	40.0	39.8	31.3	22.1	620	819	830	841
11/73-10/74	29.7	33.9	27.8	20.3	269	381	374	354
Before 10/73	21.5	32.1	32.3	24.3	233	330	313	301
Prob. 6/72-10/73	22.4	30.2	33.5	24.2	174	255	242	231
Prob. before 6/72	18.6	38.7	28.2	24.3	59	75	71	70
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	58.2	58.8	50.4	30.6	1000	1233	1270	1288
Parents	42.0	47.1	36.6	22.9	286	367	374	385
11/73 to 10/74								
Nonparents	53.0	50.0	44.9	27.8	319	408	421	425
Parents	38.1	38.5	30.8	20.8	323	429	435	427
6/72 to 10/73								
Nonparents	39.0	38.3	30.8	26.4	213	269	276	280
Parents	29.2	29.3	28.2	22.5	493	673	659	641
Before 6/72								
Nonparents	0.0	50.0	60.0	20.0	7	10	10	10
Parents	17.0	28.7	23.6	20.8	88	129	127	125

Table 5.6

Percentages of Respondents Taking Courses by Marital and Parenthood Status

Parenthood Status as of October 1976	Percentage				Sample Sizes			
	1972	1973	1974	1976	1972	1973	1974	1976
SINGLE FEMALES								
Nonparents	71.2	64.4	58.5	34.2	4235	4245	4278	4325
Parents	42.5	29.4	23.3	21.4	407	411	425	429
After 10/74	42.1	32.1	24.4	17.5	164	165	168	171
11/73-10/74	47.8	31.9	26.7	25.2	134	135	146	147
Before 10/73	36.7	22.5	17.1	22.5	109	111	111	111
Prob. 6/72-10/73	34.4	21.2	19.7	19.7	64	66	66	66
Prob. before 6/72	40.0	24.4	13.3	26.7	45	45	45	45
EVER MARRIED FEMALES								
Nonparents	53.9	40.5	31.6	14.8	2749	2758	2795	2819
Parents	26.9	14.1	9.3	7.7	2589	2596	2597	2560
After 10/74	36.1	22.3	13.6	6.2	1090	1094	1106	1113
11/73-10/74	24.2	10.7	6.0	7.9	661	662	650	621
Before 10/73	16.5	5.9	6.6	10.3	737	759	731	717
Prob. 6/72-10/73	17.5	5.1	6.6	9.7	532	532	515	507
Prob. before 6/72	14.2	7.9	6.5	11.9	225	227	216	210
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	65.5	55.2	45.7	14.6	1375	1377	1400	1409
Parents	42.7	32.7	24.8	8.9	342	342	347	350
11/73 to 10/74								
Nonparents	55.4	38.3	17.8	14.7	607	609	611	618
Parents	38.6	23.6	7.5	6.8	515	517	521	516
6/72 to 10/73								
Nonparents	33.5	15.9	17.6	15.8	660	665	675	682
Parents	22.4	7.9	6.6	7.8	1358	1360	1358	1333
Before 6/72								
Nonparents	22.0	11.0	14.0	12.8	91	91	93	94
Parents	11.9	6.6	7.2	7.4	362	365	360	350
SINGLE MALES								
Nonparents	64.0	57.4	53.5	36.5	5600	5604	5667	5796
Parents	44.0	32.4	29.4	19.7	216	219	228	239
After 10/74	45.9	31.2	32.8	15.6	122	125	125	135
11/73-10/74	41.4	37.1	26.2	25.0	70	70	80	80
Before 10/73	41.7	25.0	21.7	25.0	24	24	23	24
EVER MARRIED MALES								
Nonparents	52.1	44.0	34.1	21.8	1948	1953	2000	2040
Parents	28.8	19.2	13.8	11.2	1610	1616	1618	1610
After 10/74	35.2	24.3	16.5	13.0	818	822	836	854
11/73-10/74	21.6	13.0	9.6	8.1	384	384	376	359
Before 10/73	24.3	15.3	13.9	10.1	333	334	317	307
Prob. 6/72-10/73	25.3	16.7	12.7	11.4	257	258	245	236
Prob. before 6/72	21.1	10.5	18.1	5.6	76	76	72	71
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	56.3	50.3	39.1	22.8	1243	1247	1281	1301
Parents	36.2	27.4	19.4	11.9	367	369	376	388
11/73 to 10/74								
Nonparents	53.4	41.3	28.2	21.7	412	412	422	429
Parents	34.7	23.7	13.7	12.0	429	430	439	432
6/72 to 10/73								
Nonparents	31.6	20.6	19.5	17.7	272	272	277	288
Parents	23.5	13.4	10.7	10.9	677	679	665	653
Before 6/72								
Nonparents	30.0	20.0	30.0	10.0	10	10	10	10
Parents	16.3	10.8	13.8	8.6	129	130	130	128

decline over time in the percentages of respondents who plan to enroll for courses the following year. Among the parents, the reductions over time in planned enrollments seen in Table 5.5 are not as sharp as the corresponding drops in the actual enrollments reported in Table 5.6. Thus, early family formation can be seen to interfere with short-term educational plans, as others have reported.

The more interesting question, however, is whether the effects of early family formation are merely transitory or whether early marriage and parenthood lead to truncating educational aspirations and attainment. A more detailed analysis of the effects of early family formation on educational aspirations is deferred until Sec. VI.

WORK PLANS AND PATTERNS

Table 5.7 shows, for each marital/parenthood category, the percentage of respondents who planned to be employed the year after the survey was taken. Table 5.8 shows the corresponding percentages of respondents actually employed as of the first week of October in each of the years 1972, 1973, 1974, and 1976.

These tables reveal pronounced differences between the mothers and nonmothers, both in their plans to be employed and in their actual employment patterns. Before parenthood commenced, a higher percentage of the mothers than nonmothers planned to be employed; thereafter, fewer mothers planned to work the following year. In terms of actual employment, the mothers had much lower labor force participation rates than the nonmothers. A comparison of the rates for mothers and nonmothers among the ever married women indicates that parenthood, not marriage, caused women to drop out of the labor force.

Despite the large differences between the mothers and nonmothers, it is noteworthy that almost half of the mothers in the NLS were employed in October 1976. Moreover, as will be seen in Sec. VIII, the employed mothers worked almost as many hours per week as the nonmothers. These statistics support the view that many young women no longer consider "raising a family" as an activity that preempts pursuing a career outside the home. It is clear from these data that most young mothers play dual roles as mothers and workers.

This does not mean that motherhood has only a nominal effect on women's employment patterns. The lower labor force participation rates for mothers and the changes in rates over time associated with the timing of first birth suggest that few early mothers were employed continuously between 1972 and 1976. Undoubtedly, many more mothers than nonmothers accepted lower-paying temporary jobs. It will be seen in Sec. IX that, on average, the mothers among the NLS participants were paid considerably less than the nonmothers.

The labor force participation rates for the men in Table 5.7 show that the married men in the NLS were more likely to be employed than the single men,

Table 5.7

Percentages of Respondents Planning To Be Employed the Following Year by Marital and Parenthood Status

Parenthood Status as of October 1976	Percentage				Sample Sizes			
	1972	1973	1974	1976	1972	1973	1974	1976
SINGLE FEMALES								
Nonparents	22.5	65.2	66.6	85.6	3288	4194	4255	4273
Parents	46.0	76.1	79.0	75.9	289	406	423	411
After 10/74	48.2	74.8	76.2	72.2	110	163	168	169
11/73-10/74	46.2	77.3	78.8	79.6	106	132	146	137
Before 10/73	42.5	76.6	83.5	77.1	73	111	109	105
Prob. 6/72-10/73	50.0	83.3	85.9	81.3	32	66	64	64
Prob. before 6/72	36.6	66.7	80.0	70.7	41	45	45	41
EVER MARRIED FEMALES								
Nonparents	33.5	78.2	80.2	78.6	2104	2737	2778	2784
Parents	43.9	64.7	59.9	51.5	1873	2570	2587	2524
After 10/74	44.5	78.4	66.8	47.5	805	1086	1101	1092
11/73-10/74	49.2	53.5	52.7	53.3	474	650	649	612
Before 10/73	39.0	56.7	58.5	56.5	525	755	727	713
Prob. 6/72-10/73	36.7	55.1	57.1	55.6	341	530	511	507
Prob. before 6/72	43.5	60.4	61.6	58.7	184	225	216	206
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	27.5	73.5	75.7	80.3	1073	1364	1389	1393
Parents	43.6	82.1	79.1	52.9	241	340	345	344
11/73 to 10/74								
Nonparents	34.0	85.0	85.4	79.8	444	607	611	609
Parents	45.3	78.4	61.8	51.5	397	510	518	505
6/72 to 10/73								
Nonparents	43.4	81.7	83.9	75.3	512	661	672	675
Parents	45.0	57.5	56.2	49.3	987	1348	1357	1317
Before 6/72								
Nonparents	46.0	77.5	84.8	73.6	63	89	92	91
Parents	38.0	56.2	53.7	57.8	242	361	356	348
SINGLE MALES								
Nonparents	28.0	65.4	65.7	81.3	4321	5549	5626	5670
Parents	48.2	81.9	83.7	82.0	168	216	227	233
After 10/74	48.5	82.1	83.9	82.0	97	123	124	133
11/73-10/74	49.1	82.6	81.3	81.8	55	69	80	77
Before 10/73	43.8	79.2	91.3	82.6	16	24	23	23
EVER MARRIED MALES								
Nonparents	40.5	82.1	85.1	90.9	1549	1931	1987	2015
Parents	61.5	93.2	93.8	94.5	1197	1606	1603	1586
After 10/74	55.5	91.6	92.7	96.1	620	819	830	841
11/73-10/74	64.3	93.7	96.8	92.7	269	381	374	354
Before 10/73	73.8	95.5	93.0	91.7	233	330	313	301
Prob. 6/72-10/73	72.4	95.3	93.0	93.5	174	255	242	231
Prob. before 6/72	78.0	96.0	93.0	85.7	59	75	71	70
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	36.5	76.3	81.1	90.9	1000	1233	1270	1288
Parents	51.0	86.6	89.8	95.6	286	367	374	385
11/73 to 10/74								
Nonparents	42.6	90.4	92.2	91.8	319	408	421	425
Parents	57.6	93.5	94.9	95.8	323	429	435	427
6/72 to 10/73								
Nonparents	55.9	94.8	92.4	90.0	213	269	276	280
Parents	66.7	96.0	95.9	94.4	493	673	659	641
Before 6/72								
Nonparents	100.0	100.0	90.0	100.0	7	10	10	10
Parents	79.5	96.9	90.6	88.0	88	129	127	125

Table 5.8

Percentages of Employed Respondents by Marital and Parenthood Status

Parenthood Status as of October 1976	Percentage				Sample Sizes			
	1972	1973	1974	1976	1972	1973	1974	1976
SINGLE FEMALES								
Nonparents	45.1	57.7	63.3	79.3	4250	4251	4278	4328
Parents	43.4	51.7	51.1	55.9	412	412	425	429
After 10/74	47.9	66.1	56.0	54.4	165	165	168	171
11/73-10/74	36.8	38.2	43.2	56.5	136	136	146	147
Before 10/73	45.0	46.8	54.1	57.7	111	111	111	111
Prob. 6/72-10/73	43.9	48.5	57.6	62.1	66	66	66	66
Prob. before 6/72	46.7	44.4	48.9	51.1	45	45	45	45
EVER MARRIED FEMALES								
Nonparents	57.8	70.4	73.8	78.8	2762	2762	2795	2822
Parents	54.5	54.8	48.6	44.4	2603	2604	2597	2561
After 10/74	61.9	69.8	62.5	38.4	1097	1097	1106	1114
11/73-10/74	57.9	48.8	31.1	47.7	663	664	650	621
Before 10/73	41.0	38.8	44.9	51.2	758	758	731	717
Prob. 6/72-10/73	40.9	36.7	43.5	49.9	531	531	515	507
Prob. before 6/72	41.4	43.6	48.1	54.3	227	227	216	210
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	53.2	66.6	73.6	78.0	1378	1378	1400	1411
Parents	57.6	66.0	68.0	43.0	344	344	347	349
11/73 to 10/74								
Nonparents	59.1	77.4	75.0	81.6	611	611	611	618
Parents	60.3	71.1	51.2	42 6	519	529	521	517
6/72 to 10/73								
Nonparents	65.2	71.3	73.2	79.1	666	666	675	683
Parents	56.2	48.9	43.4	42.7	1362	1363	1358	1334
Before 6/72								
Nonparents	61.5	73.6	76.3	75.5	91	91	93	94
Parents	37.4	42.9	45.3	55.4	366	366	360	350
SINGLE MALES								
Nonparents	54.2	59.3	65.7	76.6	5631	5630	5667	5795
Parents	59.8	68.2	70.2	77.3	219	220	228	238
After 10/74	54.5	65.3	65.6	76.9	123	124	125	134
11/73-10/74	65.3	68.1	73.7	81.3	72	72	80	80
Before 10/73	70.8	83.3	82.6	66.7	24	24	23	24
EVER MARRIED MALES								
Nonparents	68.4	75.8	84.5	90.9	1966	1967	2000	2044
Parents	76.1	82.3	89.6	93.6	1635	1635	1618	1614
After 10/74	73.0	81.0	89.8	94.5	826	826	836	855
11/73-10/74	77.1	81.7	90.7	93.6	389	389	376	360
Before 10/73	81.7	87.1	89.6	92.2	334	334	317	308
Prob. 6/72-10/73	81.8	86.0	90.6	93.7	258	258	245	237
Prob. before 6/72	81.6	90.8	86.1	87.3	76	76	72	71
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	64.3	71.3	80.0	90.6	1257	1258	1281	1305
Parents	70.0	75.7	84.6	94.9	370	371	376	389
11/73 to 10/74								
Nonparents	72.5	83.6	93.6	91.4	414	414	422	429
Parents	74.9	82.9	90.7	93.6	439	438	439	435
6/72 to 10/73								
Nonparents	79.9	83.9	91.7	92.0	273	273	277	288
Parents	78.5	84.1	92.6	93.6	684	684	665	653
Before 6/72								
Nonparents	100.0	80.0	90.0	100.0	10	10	10	10
Parents	84.8	90.2	86.9	89.8	132	132	130	128

and the fathers were more likely to be employed than the nonfathers. The differences in the employment rates across marital/parenthood categories primarily reflect differences in college enrollment rates. The effects of early family formation on the educational ambitions and attainments of men will be treated in Sec. VI.

HOMEMAKER PLANS AND REALIZATIONS

Table 5.9 provides, for each marital/parenthood category and for each wave of the survey, the percentage of women whose near-term plans included homemaking at the times of the surveys. In interpreting these percentages, one must keep in mind that, on the three follow-up surveys, the women were asked, for example, to answer the question "What do you expect to be doing in October 1974?" by selecting activities from a list that included items such as "Homemaker" and "Working for pay at a full-time or part-time job." Since they could choose two or more activities, the entries in Table 5.9 for the years 1973, 1974, and 1976 should not be interpreted as percentages of women who planned on being homemakers as their main activity during the following year.

On the Base Year Questionnaire, however, the near-term plans of the women were obtained from responses to the question, "What is the one thing that most likely will take the largest share of your time in the year after you leave high school?" Hence, the percentages for 1972 in Table 5.9 are not comparable with those for the other years.

Table 5.10 gives the analogous percentages of women who listed homemaking as their main activity (in 1972) or one of their activities (on the follow-up surveys). From the portion of Table 5.10 that provides comparisons between mothers and nonmothers who were married at about the same time, we infer that it is primarily marriage, not parenthood, that accounts for the large year-to-year increases in the percentages of homemakers.

Section VII will present a detailed analysis of the effects of early family formation on women's long-term homemaker aspirations.

Table 5.9

Percentages of Women Planning To Be a Homemaker the Following Year by Marital and Parenthood Status

Parenthood Status as of October 1976	Percentage				Sample Sizes			
	1972	1973	1974	1976	1972	1973	1974	1976
SINGLE FEMALES								
Nonparents	0.6	6.3	8.9	11.5	3288	4194	4255	4273
Parents	3.5	27.3	31.9	35.3	289	406	423	411
After 10/74	0.9	12.9	25.6	33.7	110	163	168	169
11/73-10/74	2.8	34.1	33.6	38.0	106	132	146	137
Before 10/73	8.2	40.5	39.4	34.3	73	111	109	105
Prob. 6/72-10/73	0.0	36.4	34.4	34.4	32	66	64	64
Prob. before 6/72	14.6	46.7	46.7	34.1	41	45	45	41
EVER MARRIED FEMALES								
Nonparents	4.3	41.5	54.3	61.8	2104	2737	2778	2784
Parents	16.3	72.0	79.0	75.5	1873	2570	2587	2524
After 10/74	8.6	59.3	75.0	78.5	805	1086	1101	1092
11/73-10/74	13.9	79.5	82.7	73.5	474	650	649	612
Before 10/73	29.0	82.8	80.9	71.1	525	755	727	713
Prob. 6/72-10/73	29.0	83.0	81.4	70.8	341	530	511	507
Prob. before 6/72	28.8	82.2	79.6	71.8	184	225	216	206
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	0.7	12.8	36.3	60.2	1073	1364	1389	1393
Parents	3.3	26.8	51.3	72.4	241	340	345	344
11/73 to 10/74								
Nonparents	1.4	58.3	77.7	63.5	444	607	611	609
Parents	4.5	56.9	83.0	72.7	397	510	518	505
6/72 to 10/73								
Nonparents	11.3	81.1	69.9	64.9	512	661	672	675
Parents	17.9	86.0	83.8	78.7	987	1348	1357	1317
Before 6/72								
Nonparents	27.0	69.7	56.5	51.6	63	89	92	91
Parents	42.6	84.5	82.9	71.6	242	361	356	348

Table 5.10

Percentages of Women Who Were Homemakers by Marital and Parenthood Status

Parenthood Status as of October 1976	Percentage				Sample Sizes			
	1972	1973	1974	1976	1972	1973	1974	1976
SINGLE FEMALES								
Nonparents	1.9	2.3	2.2	3.8	2419	1990	4276	4332
Parents	17.8	24.9	24.2	36.4	269	245	425	429
After 10/74	8.8	15.9	11.3	35.7	102	82	168	171
11/73-10/74	21.5	23.9	29.5	32.7	93	88	146	147
Before 10/73	25.7	36.0	36.9	42.3	74	75	111	111
Prob. 6/72-10/73	15.9	23.8	34.8	37.9	44	42	66	66
Prob. before 6/72	40.0	51.5	40.0	48.9	30	33	45	45
EVER MARRIED FEMALES								
Nonparents	9.3	22.9	33.9	64.8	1327	1019	2795	2822
Parents	41.0	66.7	70.6	81.6	1309	1323	2593	2564
After 10/74	21.1	45.2	57.8	87.0	474	409	1105	1115
11/73-10/74	36.0	67.7	82.0	76.4	308	359	650	622
Before 10/73	62.9	82.3	78.2	77.2	469	497	728	718
Prob. 6/72-10/73	61.5	84.0	79.0	79.1	325	357	514	508
Prob. before 6/72	66.0	77.9	76.2	72.4	144	140	214	210
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	1.4	2.6	3.5	65.8	706	546	1400	1411
Parents	9.0	18.3	14.1	80.6	155	142	347	350
11/73 to 10/74								
Nonparents	2.0	6.1	67.3	64.4	294	196	611	618
Parents	6.1	20.2	74.0	82.6	228	183	519	517
6/72 to 10/73								
Nonparents	28.7	75.1	65.2	64.9	279	241	675	683
Parents	46.8	81.8	81.1	83.8	677	759	1357	1336
Before 6/72								
Nonparents	65.9	80.0	45.2	56.4	41	30	93	94
Parents	78.6	84.1	81.3	72.9	242	233	359	350

VI. EDUCATIONAL ATTAINMENT AND ASPIRATIONS

FAMILY FORMATION AS AN IMPEDIMENT TO POSTSECONDARY EDUCATION

Marriage and parenthood impose conditions and responsibilities on teenagers that can interfere with their educational attainment and subsequent career development. For some young women, marriage or childbearing means dropping out of college or indefinitely postponing plans for further education. For others, starting a family may present no serious obstacles to college attendance except, perhaps, for a month or two before and after childbirth. Indeed, some early mothers among the Class of 1972 completed their bachelor's degrees by October of 1976, but these were exceptional cases.

As was shown in Sec. V, the NLS participants who remained single and childless through 1976 were usually able to fulfill their short-range educational plans. Such was not the case for the early parents, whose educational attainments fell short of their plans, even though most of them had much lower educational aspirations to begin with.

Although early family formation can temporarily thwart young people's college plans, it does not ordinarily rule out further education for the highly motivated and academically talented. To be sure, many young parents are faced by financial problems and difficulties in arranging for child care, but most of them can still proceed with their educations if they so desire.

As we shall see, the NLS participants who started their families while they were still teenagers differed greatly from their classmates in their educational achievements during the first four years after high school. At least part of this differential achievement is attributable to marked differences between the parents and nonparents in ability, scholastic performance in high school, socioeconomic status (SES), and educational aspirations. In addition, some of the early parents may have simply postponed college attendance for several years, possibly because of financial problems or an inability (or unwillingness) to obtain suitable child care while they attended classes.

This section attempts to separate the effects that early family formation has on educational attainment from the effects of other factors. We begin with an analysis of actual educational attainment in 1976. To address the possibility that the attainments of early parents lag behind those of nonparents because of *postponements* (and not reductions) of educational plans, we then examine how long-term educational aspirations are affected by early family formation.

EDUCATIONAL ATTAINMENT IN 1976

Table 6.1 displays levels of educational attainment as of October 1976. It reveals large differences between the parents and nonparents for both sexes. Among the women who remained single and childless through October 1976, 27.6 percent had completed at least four years of college by October 1976. Among the women who married but had no children, 13.5 percent had obtained bachelor's degrees by October 1976. Among the mothers, only 1.6 percent had completed four years of college.

For males, the differences between the parents and nonparents were almost as large. While 17.0 percent of the nonparents had earned bachelor's degrees by October 1976, only 2.2 percent of the fathers had done so.

By converting the attainment levels in Table 6.1 to years of schooling (e.g., "less than two years of college" is counted as 13 years of education), we could calculate the average years of educational attainment in October 1976 for each of the marital/parenthood categories. These group means are reported in Table 6.2, which also provides comparisons between parents and nonparents by timing of marriage. We note from these comparisons that the early parents of both sexes lagged behind the nonparents who were married at about the same time.

Table 6.3 provides the "adjusted means" corresponding to the raw means in Table 6.2. These adjusted means (defined in App. B) are analogous to the adjusted means sometimes reported in conjunction with analysis of covariance; i.e., the adjusted means allow for differences across the groups on a set of independent variables that appear to be relevant in explaining individual differences. More precisely, the adjusted means result from the following three-stage procedure: (1) First, a linear equation using years of educational attainment as the dependent variable was fitted by least-squares to the individual data for the "control group" using a subset of independent variables chosen from the list of background factors in Table 3.3. (2) Next, the fitted equation was used to predict how much the average educational attainment of each marital/parenthood category would change if each group's mean vector of background factors were replaced by the mean vector of the control group. (3) Finally, the adjusted mean was calculated for each group by summing the raw mean and the predicted change for that group calculated in stage (2).

The control group for the adjusted means reported in Table 6.3 was the group of single nonparents as of October 1976. A later table in this section will provide the analogous adjusted means when the control group is taken to be the group of nonparents who became married before October 1973.

The following independent variables were used in adjusting the means:

Race/ethnicity indicator variables (BLACK, HISPANIC, INDIAN, ORIENTAL, OTHER)

Regional indicator variables (NEAST, SOUTH, WEST)

High school measures (ABLE, RANK, ACADEMIC, VOCTECH)

Measures of socioeconomic status (EDPA, EDMA, SEIFAOCP, MAPROF,

Table 6.1

Level of Educational Attainment as of 1976 for NLS Respondents by Marital and Parenthood Status

Parenthood Status as of October 1976	Percent by Level of Attainment							
		Voc-tech school		College				
	No college	Less than 2 years	2 years or more	Less than 2 years	2 years or more	Bachelor's degree	Graduate degree	N
SINGLE FEMALES								
Nonparents	22.5	9.1	3.4	11.8	25.7	27.4	0.2	4309
Parents	48.7	18.1	3.3	16.0	10.3	3.6	0.0	419
After 10/74	49.4	18.1	4.8	11.4	11.4	4.8	0.0	166
11/73-10/74	42.0	18.9	3.5	18.2	12.6	4.9	0.0	143
Before 10/73	56.4	17.3	0.9	20.0	5.5	0.0	0.0	110
Prob. 6/72-10/73	60.0	13.8	1.5	15.4	9.2	0.0	0.0	65
Prob. before 6/72	51.1	22.2	0.0	26.7	0.0	0.0	0.0	45
EVER MARRIED FEMALES								
Nonparents	37.8	14.3	3.5	16.0	14.9	13.4	0.1	2811
Parents	66.2	13.5	2.2	12.0	4.9	1.2	0.1	2533
After 10/74	57.8	14.6	3.1	13.7	8.6	2.1	0.1	1107
11/73-10/74	68.6	14.5	2.0	12.0	2.4	0.3	0.2	615
Before 10/73	75.8	11.1	1.3	9.7	1.4	0.7	0.0	702
Prob. 6/72-10/73	76.2	10.8	0.8	9.8	1.8	0.6	0.0	499
Prob. before 6/72	74.9	11.8	2.5	9.4	0.5	1.0	0.0	203
SINGLE MALES								
Nonparents	28.1	7.2	4.3	14.5	27.2	18.5	0.1	5761
Parents	47.7	11.8	4.6	16.9	12.7	5.9	0.4	237
After 10/74	48.1	11.3	4.5	15.8	11.3	8.3	0.8	133
11/73-10/74	48.7	11.2	5.0	18.7	13.7	2.5	0.0	80
Before 10/73	41.7	16.7	4.2	16.7	16.7	4.2	0.0	24
EVER MARRIED MALES								
Nonparents	38.3	10.6	5.4	17.2	15.9	12.4	0.2	2034
Parents	59.0	12.2	5.3	14.6	7.2	1.7	0.0	1603
After 10/74	53.7	12.5	5.8	16.8	8.9	2.4	0.0	847
11/73-10/74	64.1	11.1	5.6	13.6	4.5	1.1	0.0	359
Before 10/73	65.4	12.4	3.9	11.4	5.9	1.0	0.0	306
Prob. 6/72-10/73	64.8	12.7	3.0	11.4	6.8	1.3	0.0	236
Prob. before 6/72	67.1	11.4	7.1	11.4	2.9	0.0	0.0	70

Table 6.2

Mean Values of Years of Educational Attainment in 1976 by Marital and Parenthood Status

Parenthood Status as of October 1976	Sample Mean	Sample Size
	SINGLE FEMALES	
Nonparents	13.90	4309
Parents	12.76	419
After 10/74	12.81	166
11/73-10/74	12.89	143
Before 10/73	12.50	110
Prob. 6/72-10/73	12.51	65
Prob. before 6/72	12.49	45
	EVER MARRIED FEMALES	
Nonparents	13.22	2811
Parents	12.45	2533
After 10/74	12.61	1107
11/73-10/74	12.38	615
Before 10/73	12.29	702
Prob. 6/72-10/73	12.28	499
Prob. before 6/72	12.31	203
TIMING OF FIRST MARRIAGE:		
After 10/74		
Nonparents	13.61	1405
Parents	12.86	346
11/73 to 10/74		
Nonparents	13.03	614
Parents	12.57	513
6/72 to 10/73		
Nonparents	12.67	682
Parents	12.34	1320
Before 6/72		
Nonparents	12.56	94
Parents	12.29	344
	SINGLE MALES	
Nonparents	13.60	5761
Parents	12.90	237
After 10/74	12.98	133
11/73-10/74	12.77	80
Before 10/73	12.92	24
	EVER MARRIED MALES	
Nonparents	13.21	2034
Parents	12.59	1603
After 10/74	12.68	847
11/73-10/74	12.49	359
Before 10/73	12.47	306
Prob. 6/72-10/73	12.49	236
Prob. before 6/72	12.43	70
TIMING OF FIRST MARRIAGE:		
After 10/74		
Nonparents	13.36	1301
Parents	12.71	382
11/73 to 10/74		
Nonparents	13.09	426
Parents	12.63	435
6/72 to 10/73		
Nonparents	12.73	285
Parents	12.51	651
Before 6/72		
Nonparents	12.70	10
Parents	12.46	127

Table 6.3

Adjusted Mean Values of Years of Educational Attainment in 1976 by Marital and Parenthood Status

Parenthood Status as of October 1976	Adjusted Mean	Standard Error
	SINGLE FEMALES	
Nonparents	13.90	0.02
Parents	13.60	0.07
After 10/74	13.67	0.10
11/73-10/74	13.65	0.10
Before 10/73	13.43	0.12
Prob. 6/72-10/73	13.54	0.15
Prob. before 6/72	13.32	0.18
	EVER MARRIED FEMALES	
Nonparents	13.52	0.02
Parents	13.21	0.03
After 10/74	13.24	0.04
11/73-10/74	13.24	0.05
Before 10/73	13.12	0.05
Prob. 6/72-10/73	13.10	0.06
Prob. before 6/72	13.17	0.09
TIMING OF FIRST MARRIAGE:		
After 10/74		
Nonparents	13.76	0.03
Parents	13.50	0.06
11/73 to 10/74		
Nonparents	13.36	0.05
Parents	13.28	0.05
6/72 to 10/73		
Nonparents	13.22	0.05
Parents	13.12	0.04
Before 6/72		
Nonparents	13.28	0.12
Parents	13.14	0.07
	SINGLE MALES	
Nonparents	13.60	0.01
Parents	13.50	0.08
After 10/74	13.58	0.10
11/73-10/74	13.31	0.13
Before 10/73	13.68	0.23
	EVER MARRIED MALES	
Nonparents	13.50	0.03
Parents	13.30	0.03
After 10/74	13.30	0.04
11/73-10/74	13.29	0.06
Before 10/73	13.31	0.07
Prob. 6/72-10/73	13.27	0.07
Prob. before 6/72	13.42	0.13
TIMING OF FIRST MARRIAGE:		
After 10/74		
Nonparents	13.56	0.03
Parents	13.33	0.06
11/73 to 10/74		
Nonparents	13.44	0.05
Parents	13.32	0.05
6/72 to 10/73		
Nonparents	13.36	0.07
Parents	13.25	0.05
Before 6/72		
Nonparents	13.34	0.35
Parents	13.41	0.10

MAHOME, SIBS, SIBSCOLL)

Other family background factors (PALSCOLL, CATHOLIC, JEWISH)

Appendix D contains the regression equations relating educational attainment to this list of background factors among single nonparents.

Using the adjusted means and standard errors in Table 6.3, one can make comparisons between any two marital/parenthood categories by following the procedures outlined in App. B. To facilitate making comparisons with the group of single nonparents, Table 6.4 provides a set of "intergroup differences." The entries in the table are the differences between the adjusted group means and the mean for the group of single nonparents. For any particular category, the t-statistic for testing the hypothesis of no effects due to early family formation for individuals in that category can be obtained by dividing the difference by the corresponding standard error. For example, the estimate of the average parenthood effect on educational attainment for single mothers is a loss of 0.30 years. Since the standard error of that estimate is 0.07, the t-statistic is $-0.30/0.07 = -4.3$.

The pattern of differences across categories in Table 6.4 clearly points to the conclusion that the earlier the marriage date or entry into parenthood, the larger the difference in educational attainment from the control group. Almost without exception, the differences from the control group are highly significant. Early marriage seems to have a pronounced negative effect on women's educational attainment, whether or not the women become mothers soon after marriage. The estimated average effect of marriage on educational attainment among women who married between June 1972 and October 1973 was -0.68 years. For those married during the next twelve months, the average effect was -0.54 years. The corresponding average effect for men was only a third as large.

Contrasting the entries for the ever married parents with those for the nonparents who were married at about the same time, we see the differences were only about 0.1 year for those who were married before October 1974. This indicates that the average effects of parenthood on young married people are small relative to the marital effects.

To pinpoint these differences more precisely, the analysis was replicated using only the data on those NLS participants who married before October 1973. Using the nonparents in this group as the control group allows one to estimate the effects of early parenthood among a much more homogeneous group of NLS participants. The group means, adjusted means, and intergroup differences for this second control group are reported in Table 6.5. The fitted equations that were used to make the adjustments are given in App. D. (The list of independent variables was the same as before except that the variables INDIAN, ORIENTAL, OTHER, JEWISH, and CATHOLIC were omitted because of very small sample sizes in certain subpopulations.)

It is clear from the pattern of adjusted means and intergroup differences in Table 6.5 that, among the NLS participants who became married before October 1973, the differences between the parents and nonparents in educa-

Table 6.4

Intergroup Differences in Adjusted Means for Years of Educational Attainment in 1976

Parenthood Status as of October 1976	Differences from Single Nonparents	Standard Error
	SINGLE FEMALES	
Nonparents	----	----
Parents	-0.30	0.07
After 10/74	-0.22	0.10
11/73-10/74	-0.25	0.11
Before 10/73	-0.46	0.12
Prob. 6/72-10/73	-0.35	0.15
Prob. before 6/72	-0.58	0.18
	EVER MARRIED FEMALES	
Nonparents	-0.38	0.03
Parents	-0.69	0.03
After 10/74	-0.65	0.04
11/73-10/74	-0.65	0.05
Before 10/73	-0.77	0.05
Prob. 6/72-10/73	-0.80	0.06
Prob. before 6/72	-0.73	0.09
TIMING OF FIRST MARRIAGE:		
After 10/74		
Nonparents	-0.14	0.04
Parents	-0.40	0.07
11/73 to 10/74		
Nonparents	-0.54	0.05
Parents	-0.62	0.06
6/72 to 10/73		
Nonparents	-0.68	0.05
Parents	-0.78	0.04
Before 6/72		
Nonparents	-0.62	0.13
Parents	-0.76	0.07
	SINGLE MALES	
Nonparents	----	----
Parents	-0.10	0.08
After 10/74	-0.02	0.10
11/73-10/74	-0.28	0.13
Before 10/73	0.08	0.23
	EVER MARRIED MALES	
Nonparents	-0.10	0.03
Parents	-0.29	0.03
After 10/74	-0.30	0.04
11/73-10/74	-0.30	0.06
Before 10/73	-0.29	0.07
Prob. 6/72-10/73	-0.33	0.07
Prob. before 6/72	-0.17	0.13
TIMING OF FIRST MARRIAGE:		
After 10/74		
Nonparents	-0.04	0.03
Parents	-0.27	0.06
11/73 to 10/74		
Nonparents	-0.16	0.06
Parents	-0.27	0.06
6/72 to 10/73		
Nonparents	-0.24	0.07
Parents	-0.35	0.05
Before 6/72		
Nonparents	-0.25	0.35
Parents	-0.19	0.10

Table 6.5

Results of the Analysis of Years of Educational Attainment in 1976 for NLS Respondents Who Were Married as of October 1973

Parenthood Status as of October 1976	Sample Mean	Sample Size
	FEMALES	
Nonparents	12.65	776
Parents	12.33	1664
After 10/74	12.40	492
11/73-10/74	12.32	456
Before 10/73	12.29	625
Prob. 6/72-10/73	12.28	446
Prob. before 6/72	12.32	179
	MALES	
Nonparents	12.73	295
Parents	12.50	778
After 10/74	12.54	201
11/73-10/74	12.54	223
Before 10/73	12.47	286
Prob. 6/72-10/73	12.47	219
Prob. before 6/72	12.43	67

Parenthood Status as of October 1976	Adjusted Mean	Standard Error
	FEMALES	
Nonparents	12.65	0.03
Parents	12.40	0.03
After 10/74	12.44	0.04
11/73-10/74	12.42	0.04
Before 10/73	12.34	0.04
Prob. 6/72-10/73	12.35	0.04
Prob. before 6/72	12.34	0.07
	MALES	
Nonparents	12.73	0.05
Parents	12.57	0.05
After 10/74	12.59	0.07
11/73-10/74	12.61	0.07
Before 10/73	12.52	0.07
Prob. 6/72-10/73	12.50	0.08
Prob. before 6/72	12.57	0.13

Parenthood Status as of October 1976	Differences from Married Nonparents	Standard Error
	FEMALES	
Nonparents	----	----
Parents	-0.26	0.04
After 10/74	-0.21	0.05
11/73-10/74	-0.23	0.05
Before 10/73	-0.31	0.05
Prob. 6/72-10/73	-0.31	0.05
Prob. before 6/72	-0.31	0.08
	MALES	
Nonparents	----	----
Parents	-0.16	0.07
After 10/74	-0.13	0.09
11/73-10/74	-0.12	0.09
Before 10/73	-0.21	0.09
Prob. 6/72-10/73	-0.23	0.10
Prob. before 6/72	-0.16	0.14

tional attainment are small. After allowing for differences in background factors, the early mothers lag behind the other women in this group by about 0.3 years on average, and the fathers lag behind the nonfathers by about 0.2 years.[1] Since the corresponding t-statistics for testing the hypothesis of no parenthood effects are −6.2 for females and −2.3 for males, these differences are statistically significant.

While the magnitudes of the average effects attributable to early parenthood are small, they represent a substantial amount of postsecondary schooling for the individuals in this group. From Table 6.5, we note that the nonparents in this group averaged only about two-thirds of a year of postsecondary education between June 1972 and October 1976. The mothers in the group averaged only one-third of a year, and the fathers averaged only a half year.

Returning to Tables 6.2 and 6.3, we note that the differences between the adjusted group means (Table 6.3) are considerably smaller than the corresponding differences in the raw means (Table 6.2). This indicates that the differences in educational attainment across marital/parenthood categories are largely due to differences in background factors. The inclusion of other variables might shrink the differences further. In particular, we deliberately omitted from our list of independent variables the NLS participants' educational expectations as high school seniors. We did so because evidence in the next section suggests that many seniors' educational expectations may have been affected by marriage plans and knowledge of pregnancy before they left high school.

Caution is necessary in interpreting differences in actual educational attainment of parents and nonparents at any point in time. Such comparisons may be misleading because some of these young people, especially young mothers, may simply postpone their educational plans without changing their long-term ambitions. Since it is possible that the lags in college attendance among early parents will be made up some time in the future, data on educational attainment cannot totally refute the hypothesis that parenthood has no effect on lifetime educational attainment. To provide more compelling evidence concerning this hypothesis, it is necessary to examine changes in long-term educational aspirations.

EFFECTS ON EDUCATIONAL ASPIRATIONS

On each of the four waves of the survey, the NLS participants were asked about their long-term educational aspirations. The Base Year Questionnaire asked the seniors to consider several educational patterns and select "the highest level you plan to attain." On the three follow-up surveys, the participants were asked, "As things stand now, how far in school do you think you actually will get?" Using the responses to those questions, we created four

[1] It is noteworthy that these estimates of the average effects of parenthood are somewhat higher than the estimates of 0.1 year for both sexes derived from Table 6.4. This shows that the estimates of the effects of family formation are somewhat sensitive to the choice of the control group.

measures of educational expectations called EDEXP72, EDEXP73, EDEXP74, and EDEXP76, which are defined in App. A. The mean values of these variables by marital/parenthood category are given in Table 6.6.

The first column of this table shows that early parents had much lower educational aspirations when they were still seniors. Although most of the early parents did not marry or have children until they left high school, it is possible that their educational aspirations were reduced earlier by marital plans or knowledge of pregnancy, in which case the 1972 scores may have been affected by what might be called "anticipatory effects" of early family formation.

An interesting feature of Table 6.6 is that the group means for 1976 aspirations greatly exceed the corresponding means for actual educational attainments in 1976 that were reported in Table 6.2. For example, the single women who became mothers before October 1973 averaged only 0.5 years of postsecondary education by October 1976; yet we see from Table 6.6 that they eventually expect to average 2.4 years of postsecondary schooling. Despite the meager amounts of college attendance reported by the early parents through October 1976, many of them still expect to earn bachelor's degrees.

Table 6.7 gives the adjusted means, based upon regression equations reported in App. D. The differences in the adjusted means for 1972 are differences that existed when the NLS participants were still seniors, before most of them started their families. The differences of the group means from the mean for single nonparents are most pronounced for those who were married as of June 1972, especially those who were classified as probable parents at that time. While some of the differences in the 1972 adjusted means reflect sampling errors that result from the small sample sizes in some categories, there is a clear-cut relationship between the adjusted means and timing of family formation. The differences in 1972 are less pronounced for those who deferred starting their families until after October 1974, but the fact that they exist indicates either that (a) the 1972 measures were affected by "anticipatory effects" of early family formation (e.g., plans to marry after high school graduation), or (b) there are missing variables related to both the timing of family formation and to educational aspirations that account for the differences. In either case, the differences in the 1972 adjusted group means from the mean for the control group provide benchmarks for assessing the later differences.

Before proceeding, we pause to note that the problem of preexisting differences across marital/parenthood categories will occur in analyzing most of the other outcome measures considered in this study. It did not appear in the analysis of educational attainment through October 1976, because there were no preexisting differences in 1972. At that time, the NLS participants, as high school seniors, were all close to completing twelve years of schooling.[2]

Table 6.8 provides the intergroup differences for comparing the marital/

[2]A few of the NLS seniors reported on the base year survey that they did not plan to complete high school until after the summer of 1972, and some planned to drop out of high school before they completed their senior years. Fewer than one percent of the participants belonged to either group.

Table 6.6

Mean Values of Expected Years of Educational Attainment by Marital and Parenthood Status

Parenthood Status as of October 1976	Sample Means				Sample Sizes			
	1972	1973	1974	1976	1972	1973	1974	1976
SINGLE FEMALES								
Nonparents	15.12	15.17	15.39	15.80	2624	4021	3982	4128
Parents	13.97	13.89	13.91	14.38	154	391	378	403
After 10/74	14.00	13.82	13.80	14.11	67	154	138	160
11/73-10/74	14.15	14.09	14.19	14.70	61	128	135	137
Before 10/73	13.46	13.74	13.69	14.38	26	109	105	106
Prob. 6/72-10/73	14.20	13.61	13.78	14.43	10	66	60	61
Prob. before 6/72	13.00	13.95	13.56	14.31	16	43	45	45
EVER MARRIED FEMALES								
Nonparents	14.25	14.04	14.19	14.42	1653	2590	2562	2594
Parents	13.41	13.12	13.14	13.45	1343	2393	2367	2302
After 10/74	13.62	13.34	13.28	13.55	594	1007	1007	999
11/73-10/74	13.39	12.98	13.07	13.45	338	627	609	541
Before 10/73	13.11	12.95	13.03	13.33	363	736	682	664
Prob. 6/72-10/73	13.12	12.91	12.98	13.29	248	517	483	471
Prob. before 6/72	13.10	13.04	13.14	13.42	115	219	199	193
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	14.66	14.55	14.66	14.87	856	1300	1302	1307
Parents	14.09	13.90	13.86	14.13	177	316	316	312
11/73 to 10/74								
Nonparents	14.17	13.75	13.88	14.12	344	580	563	567
Parents	13.65	13.38	13.20	13.54	285	484	472	454
6/72 to 10/73								
Nonparents	13.59	13.37	13.54	13.84	401	609	610	624
Parents	13.27	12.88	12.98	13.30	718	1247	1240	1211
Before 6/72								
Nonparents	12.98	13.07	13.60	13.83	42	87	83	84
Parents	12.83	12.89	12.98	13.19	159	337	333	317
SINGLE MALES								
Nonparents	15.30	15.37	15.45	15.68	3339	5244	5168	5495
Parents	14.15	14.49	14.44	14.67	97	205	200	226
After 10/74	14.37	14.59	14.35	14.72	60	116	103	128
11/73-10/74	13.68	14.38	14.55	14.57	28	65	76	75
Before 10/73	14.22	14.29	14.48	14.74	9	24	21	23
EVER MARRIED MALES								
Nonparents	14.72	14.63	14.64	14.77	1134	1791	1768	1904
Parents	13.78	13.62	13.57	13.88	756	1463	1401	1470
After 10/74	14.02	13.70	13.70	13.95	404	761	739	769
11/73-10/74	13.57	13.54	13.41	13.86	174	357	344	329
Before 10/73	13.37	13.52	13.40	13.76	132	323	270	289
Prob. 6/72-10/73	13.52	13.57	13.44	13.77	100	250	213	222
Prob. before 6/72	12.91	13.34	13.28	13.75	32	73	57	67
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	14.91	14.87	14.88	14.97	739	1159	1140	1216
Parents	14.22	13.99	14.03	14.24	185	332	332	353
11/73 to 10/74								
Nonparents	14.57	14.37	14.36	14.59	246	376	374	401
Parents	13.87	13.74	13.54	13.90	219	386	382	389
6/72 to 10/73								
Nonparents	14.00	13.89	13.94	14.14	136	237	241	266
Parents	13.58	13.40	13.37	13.68	294	621	580	602
Before 6/72								
Nonparents	12.83	14.50	14.30	14.33	6	10	10	9
Parents	12.94	13.36	13.21	13.71	54	120	101	119

Table 6.7

Adjusted Mean Values of Expected Years of Educational Attainment by Marital and Parenthood Status

Parenthood Status as of October 1976	Adjusted Means				Standard Errors			
	1972	1973	1974	1976	1972	1973	1974	1976
SINGLE FEMALES								
Nonparents	15.12	15.17	15.39	15.80	0.03	0.03	0.03	0.03
Parents	14.80	14.83	14.79	15.35	0.12	0.10	0.10	0.11
After 10/74	14.89	14.86	14.80	15.18	0.17	0.14	0.16	0.16
11/73-10/74	14.86	14.88	14.92	15.52	0.18	0.16	0.16	0.17
Before 10/73	14.36	14.74	14.61	15.42	0.28	0.17	0.18	0.19
Prob. 6/72-10/73	15.26	14.82	14.92	15.70	0.44	0.21	0.24	0.25
Prob. before 6/72	13.74	14.74	14.27	15.14	0.35	0.26	0.27	0.29
EVER MARRIED FEMALES								
Nonparents	14.78	14.63	14.77	15.01	0.04	0.04	0.04	0.04
Parents	14.48	14.32	14.33	14.65	0.05	0.04	0.05	0.05
After 10/74	14.58	14.41	14.34	14.62	0.06	0.06	0.06	0.07
11/73-10/74	14.59	14.32	14.40	14.81	0.08	0.07	0.08	0.09
Before 10/73	14.24	14.20	14.26	14.59	0.08	0.07	0.07	0.08
Prob. 6/72-10/73	14.25	14.16	14.21	14.55	0.09	0.08	0.09	0.09
Prob. before 6/72	14.20	14.28	14.34	14.67	0.13	0.12	0.13	0.14
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	14.95	14.88	14.98	15.19	0.05	0.05	0.05	0.05
Parents	14.89	14.81	14.76	15.03	0.11	0.10	0.10	0.11
11/73 to 10/74								
Nonparents	14.75	14.39	14.52	14.75	0.08	0.07	0.08	0.08
Parents	14.64	14.49	14.29	14.65	0.09	0.08	0.09	0.09
6/72 to 10/73								
Nonparents	14.50	14.37	14.52	14.83	0.07	0.07	0.08	0.08
Parents	14.41	14.14	14.23	14.57	0.06	0.05	0.06	0.06
Before 6/72								
Nonparents	14.21	14.38	14.90	15.17	0.22	0.18	0.20	0.21
Parents	14.07	14.26	14.33	14.58	0.12	0.10	0.10	0.11
SINGLE MALES								
Nonparents	15.30	15.37	15.45	15.68	0.03	0.03	0.03	0.03
Parents	14.85	15.23	15.06	15.31	0.16	0.14	0.14	0.14
After 10/74	15.08	15.36	15.00	15.38	0.19	0.18	0.19	0.18
11/73-10/74	14.28	14.99	15.04	15.08	0.28	0.23	0.22	0.23
Before 10/73	15.11	15.27	15.35	15.63	0.49	0.38	0.41	0.41
EVER MARRIED MALES								
Nonparents	15.20	15.16	15.18	15.32	0.05	0.05	0.05	0.05
Parents	14.89	14.83	14.76	15.09	0.06	0.05	0.06	0.06
After 10/74	15.02	14.78	14.78	15.05	0.08	0.07	0.07	0.07
11/73-10/74	14.78	14.87	14.70	15.17	0.11	0.10	0.10	0.11
Before 10/73	14.61	14.90	14.75	15.13	0.13	0.11	0.12	0.12
Prob. 6/72-10/73	14.68	14.86	14.69	15.05	0.15	0.12	0.13	0.13
Prob. before 6/72	14.39	14.99	14.91	15.40	0.26	0.22	0.25	0.24
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	15.24	15.24	15.26	15.35	0.05	0.06	0.06	0.06
Parents	15.13	15.00	15.01	15.24	0.11	0.10	0.10	0.11
11/73 to 10/74								
Nonparents	15.14	14.99	14.99	15.24	0.09	0.10	0.10	0.10
Parents	14.95	14.91	14.70	15.08	0.10	0.10	0.10	0.10
6/72 to 10/73								
Nonparents	15.02	15.00	15.07	15.29	0.13	0.12	0.12	0.12
Parents	14.75	14.69	14.64	14.96	0.09	0.08	0.08	0.08
Before 6/72								
Nonparents	13.89	15.66	15.45	15.53	0.60	0.59	0.58	0.65
Parents	14.38	14.94	14.80	15.32	0.20	0.17	0.19	0.18

Table 6.8

Intergroup Differences in Adjusted Means for Expected Years of Educational Attainment

Parenthood Status as of October 1976	Differences from Single nonparents 1972	1973	1974	1976	Standard Errors 1972	1973	1974	1976
SINGLE FEMALES								
Nonparents	----	----	----	----	----	----	----	----
Parents	-0.32	-0.35	-0.60	-0.44	0.12	0.10	0.11	0.11
After 10/74	-0.22	-0.31	-0.58	-0.61	0.18	0.14	0.16	0.16
11/73-10/74	-0.25	-0.29	-0.47	-0.28	0.19	0.16	0.16	0.17
Before 10/73	-0.75	-0.43	-0.77	-0.38	0.28	0.17	0.18	0.20
Prob. 6/72-10/73	0.15	-0.35	-0.47	-0.09	0.44	0.22	0.24	0.25
Prob. before 6/72	-1.37	-0.43	-1.11	-0.66	0.35	0.26	0.27	0.29
EVER MARRIED FEMALES								
Nonparents	-0.33	-0.54	-0.61	-0.79	0.05	0.05	0.05	0.05
Parents	-0.63	-0.85	-1.06	-1.14	0.05	0.05	0.05	0.06
After 10/74	-0.54	-0.77	-1.05	-1.18	0.07	0.06	0.07	0.07
11/73-10/74	-0.53	-0.85	-0.99	-0.99	0.09	0.08	0.08	0.09
Before 10/73	-0.88	-0.97	-1.13	-1.20	0.08	0.07	0.08	0.09
Prob. 6/72-10/73	-0.87	-1.02	-1.17	-1.25	0.10	0.08	0.09	0.10
Prob. before 6/72	-0.92	-0.90	-1.04	-1.12	0.14	0.12	0.13	0.14
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	-0.16	-0.29	-0.40	-0.60	0.06	0.05	0.06	0.06
Parents	-0.23	-0.36	-0.63	-0.76	0.11	0.10	0.11	0.11
11/73 to 10/74								
Nonparents	-0.37	-0.78	-0.87	-1.04	0.08	0.08	0.08	0.09
Parents	-0.48	-0.69	-1.10	-1.15	0.09	0.08	0.09	0.10
6/72 to 10/73								
Nonparents	-0.62	-0.81	-0.86	-0.96	0.08	0.08	0.08	0.09
Parents	-0.71	-1.03	-1.16	-1.22	0.06	0.06	0.06	0.07
Before 6/72								
Nonparents	-0.91	-0.79	-0.49	-0.63	0.22	0.19	0.20	0.21
Parents	-1.05	-0.91	-1.06	-1.22	0.12	0.10	0.11	0.12
SINGLE MALES								
Nonparents	----	----	----	----	----	----	----	----
Parents	-0.45	-0.14	-0.39	-0.37	0.16	0.14	0.14	0.14
After 10/74	-0.22	0.00	-0.45	-0.30	0.20	0.18	0.19	0.18
11/73-10/74	-1.03	-0.38	-0.42	-0.60	0.28	0.24	0.22	0.23
Before 10/73	-0.19	-0.10	-0.10	-0.05	0.49	0.38	0.41	0.41
EVER MARRIED MALES								
Nonparents	-0.10	-0.21	-0.27	-0.36	0.05	0.05	0.05	0.05
Parents	-0.41	-0.54	-0.69	-0.59	0.06	0.06	0.06	0.06
After 10/74	-0.28	-0.59	-0.67	-0.63	0.08	0.08	0.08	0.08
11/73-10/74	-0.52	-0.50	-0.75	-0.50	0.12	0.10	0.11	0.11
Before 10/73	-0.69	-0.47	-0.70	-0.55	0.13	0.11	0.12	0.12
Prob. 6/72-10/73	-0.62	-0.51	-0.76	-0.63	0.15	0.12	0.13	0.14
Prob. before 6/72	-0.91	-0.39	-0.54	-0.28	0.26	0.22	0.25	0.24
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	-0.06	-0.13	-0.19	-0.33	0.06	0.06	0.06	0.06
Parents	-0.17	-0.37	-0.44	-0.44	0.11	0.11	0.11	0.11
11/73 to 10/74								
Nonparents	-0.16	-0.38	-0.46	-0.44	0.10	0.10	0.10	0.10
Parents	-0.35	-0.46	-0.75	-0.59	0.10	0.10	0.10	0.10
6/72 to 10/73								
Nonparents	-0.28	-0.37	-0.39	-0.39	0.13	0.13	0.12	0.12
Parents	-0.55	-0.69	-0.82	-0.71	0.09	0.08	0.09	0.09
Before 6/72								
Nonparents	-1.41	0.29	0.00	-0.15	0.60	0.59	0.58	0.65
Parents	-0.93	-0.43	-0.66	-0.36	0.20	0.17	0.19	0.18

parenthood categories with the group of single nonparents. The average effects of family formation in a given period—say, between 1972 and 1974—can be estimated by taking the difference between the entry for 1974 and the corresponding entry for 1972. For example, the estimates of the average effects of early family formation for mothers who married between June 1972 and October 1973 are obtained from the entries −0.71, −1.03, −1.16, and −1.22. The estimated average effect through October 1973 is −1.03 − (−0.71) = −0.32, and the average effect through October 1974 is −1.16 − (−0.71) = −0.45. It follows from Eq. (24) in App. B that the standard errors of these estimates are approximately 0.08.

Table 6.8 reveals that the effects of early family formation on women's educational plans continued to mount over time, except for those who started their families before they left high school. For men, the effects seem to be smaller in magnitude, and it is not clear that they build over time. Among the ever married women, the effect of marriage on educational plans seems to be almost as large as the combined effects of marriage and parenthood. Restricting attention to the women who married between November 1973 and October 1974, we see from the entries for 1972 and 1974 (namely, −0.37 and −0.87) that the estimated average effect of marriage between 1972 and 1974 was −0.50 years, whereas the corresponding estimate for the mothers was −0.62. Among men who married during the same twelve-month period, the analogous estimated average effects were −0.30 (marriage alone) and −0.40 (marriage and parenthood). Thus, the dominant effects of family formation on education plans are those associated with marriage.

Table 6.9, restricted to the NLS participants who married before October 1973, furnishes clearer evidence of the effects of parenthood among the NLS participants who married early. Estimating the average effects of parenthood from changes between 1972 and 1976 in the intergroup differences, we see that the average effects of parenthood are of the order of 0.2 to 0.3 years for women and between 0.1 and 0.3 years for men.

These estimated average effects of early parenthood on educational expectations are very close to the analogous estimates for actual educational attainment as of October 1976. This matching of losses in educational attainment with reductions in long-term educational expectations suggests that early parenthood leads to permanent reductions, and not merely postponements, in educational attainment. On the other hand, the parenthood effects are small, and most of the NLS participants who began their families early expected to complete substantially more postsecondary education.

THE EFFECTS OF OTHER FACTORS

Our analysis of changes in educational expectations between 1972 and 1976 reveals moderate-sized reductions in expectations associated with early marriage and smaller further reductions associated with parenthood. However,

Table 6.9

Results of the Analysis of Expected Years of Educational Attainment for NLS Respondents Who Were Married as of October 1973

Parenthood Status as of October 1976	Sample Means 1972	1973	1974	1976	Sample Sizes 1972	1973	1974	1976
FEMALES								
Nonparents	13.53	13.34	13.54	13.84	443	696	693	708
Parents	13.19	12.89	12.98	13.28	877	1584	1573	1528
After 10/74	13.28	12.92	12.96	13.21	257	441	455	451
11/73-10/74	13.22	12.81	12.97	13.34	250	474	446	403
Before 10/73	13.10	12.92	13.02	13.32	327	655	605	590
Prob. 6/72-10/73	13.13	12.88	12.96	13.27	223	461	428	419
Prob. before 6/72	13.05	13.02	13.15	13.44	104	194	177	171
MALES								
Nonparents	13.95	13.91	13.96	14.15	142	247	251	275
Parents	13.48	13.40	13.34	13.69	348	741	681	721
After 10/74	13.60	13.26	13.23	13.71	90	188	179	185
11/73-10/74	13.52	13.35	13.34	13.61	100	237	209	204
Before 10/73	13.38	13.50	13.42	13.73	126	303	249	270
Prob. 6/72-10/73	13.52	13.55	13.45	13.70	96	233	195	206
Prob. before 6/72	12.93	13.36	13.31	13.80	30	70	54	64

Parenthood Status as of October 1976	Adjusted Means 1972	1973	1974	1976	Standard Errors 1972	1973	1974	1976
FEMALES								
Nonparents	13.53	13.34	13.54	13.84	0.07	0.05	0.06	0.07
Parents	13.32	12.98	13.07	13.39	0.07	0.05	0.05	0.06
After 10/74	13.36	12.99	13.04	13.30	0.10	0.07	0.08	0.09
11/73-10/74	13.44	12.99	13.14	13.57	0.10	0.08	0.09	0.10
Before 10/73	13.20	12.95	13.04	13.35	0.10	0.07	0.08	0.09
Prob. 6/72-10/73	13.24	12.94	13.04	13.36	0.11	0.08	0.09	0.10
Prob. before 6/72	13.07	12.96	13.04	13.34	0.17	0.12	0.14	0.16
MALES								
Nonparents	13.95	13.91	13.96	14.15	0.12	0.12	0.12	0.12
Parents	13.67	13.58	13.53	13.71	0.10	0.10	0.10	0.10
After 10/74	13.73	13.25	13.31	13.81	0.16	0.14	0.14	0.15
11/73-10/74	13.72	13.55	13.51	13.63	0.16	0.14	0.14	0.15
Before 10/73	13.57	13.74	13.65	13.68	0.17	0.15	0.16	0.16
Prob. 6/72-10/73	13.62	13.70	13.59	13.60	0.18	0.16	0.17	0.17
Prob. before 6/72	13.41	13.83	13.81	13.94	0.29	0.26	0.28	0.28

Parenthood Status as of October 1976	Differences from Married Nonparents 1972	1973	1974	1976	Standard Errors 1972	1973	1974	1976
FEMALES								
Nonparents	----	----	----	----	----	----	----	----
Parents	-0.21	-0.36	-0.48	-0.45	0.10	0.07	0.08	0.09
After 10/74	-0.17	-0.34	-0.50	-0.54	0.12	0.09	0.10	0.11
11/73-10/74	-0.09	-0.34	-0.40	-0.27	0.13	0.09	0.10	0.12
Before 10/73	-0.34	-0.38	-0.51	-0.49	0.12	0.09	0.10	0.11
Prob. 6/72-10/73	-0.29	-0.39	-0.51	-0.48	0.13	0.10	0.11	0.12
Prob. before 6/72	-0.46	-0.37	-0.51	-0.50	0.18	0.13	0.15	0.17
MALES								
Nonparents	----	----	----	----	----	----	----	----
Parents	-0.28	-0.33	-0.42	-0.44	0.16	0.15	0.15	0.15
After 10/74	-0.22	-0.66	-0.65	-0.34	0.20	0.18	0.19	0.19
11/73-10/74	-0.24	-0.36	-0.44	-0.52	0.20	0.18	0.18	0.19
Before 10/73	-0.38	-0.17	-0.31	-0.47	0.20	0.19	0.19	0.20
Prob. 6/72-10/73	-0.33	-0.21	-0.36	-0.55	0.22	0.20	0.20	0.21
Prob. before 6/72	-0.54	-0.08	-0.14	-0.21	0.32	0.28	0.30	0.30

these reductions may not be solely attributable to the effects of early family formation: other factors may also tend to thwart educational plans. To gain information on the effects of other factors and to obtain alternative "ballpark" estimates of the effects of early marriage and parenthood on educational expectations, we performed an analysis of covariance using, as the dependent variable, the change in educational expectations between 1972 and 1976.

The independent variables for this analysis are indicated in Table 6.10. The background factors on this list are defined in Table 3.3 and App. A. Indicator variables were included for each of the main activities ("postsecondary tracks") in October 1972 except the civilian labor force as the omitted category. (The distributions of these activities by marital/parenthood categories were reported in Table 5.2.) The variable "Expecting to be married" is an indicator variable for NLS respondents who were single in October 1976 but planned to marry within a year. The variable "Expecting parenthood, 1976" is an indicator variable for respondents who had no children in October 1976 but expected to have a child before October 1977. The variable "Two or more children, 1976" is an indicator variable for parents who had more than one child in October 1976.

The regression coefficients on the marital and parenthood status indicator variables provide very rough estimates of the average effects of marriage and parenthood. In interpreting these estimates, it is important to bear in mind that the choice of postsecondary activities in October 1972 may have been determined in part by marriage and parenthood plans; consequently, the average effects of marriage and parenthood may be somewhat distorted by these equations. Also, the homogeneity-of-slopes hypothesis, which is implicit in our omission of numerous interaction terms from the fitted equation, is open to question.

Despite these reservations, the regression results for women tend to confirm the previous results. The coefficient on "Married" is substantially larger than the coefficients on the parenthood indicators. The large coefficient on "Expecting to be married" indicates the negative effect associated with marital plans in October 1976. This coefficient is more than twice as large as the coefficient on "Expecting parenthood, 1976." Because of the possible distortions involved in fitting this equation, the pattern of coefficients on the parenthood indicator variables cannot be interpreted as indicating that the earlier parenthood occurs, the less the effect. In particular, since parenthood before October 1973 in many cases involved pregnancy before June 1972, reductions in the 1972 measure (EDEXP72) would tend to inflate the difference (EDEXP76 – EDEXP72), thereby confounding the analysis.

For males, the pattern of regression coefficients suggests that parenthood has a more detrimental effect on educational plans than marriage does. The interpretation of this pattern must be tempered by the observation that, for many men (and perhaps women too), the decision to have children may be postponed until they have completed their educations. Instead of parenthood causing a reduction in educational expectations, the cause-and-effect relationship may in fact be the reverse. If so, then the parenthood indicator variables, intended to capture the effects of parenthood, may simply identify subpopula-

Table 6.10

Regression Results for the Change in Expected Years of Educational Attainment Between 1972 and 1976

Variable	Females b	Females t	Males b	Males t
Constant	-0.677	-2.5	-0.255	-0.9
Race/ethnicity				
Black	0.222	2.6	0.504	4.9
Hispanic	0.110	0.8	0.185	1.2
Indian	-0.158	-0.6	0.520	2.0
Oriental	-0.250	-1.0	-0.068	-0.3
Other minority	0.305	1.8	0.269	1.5
Region				
Northeast	0.095	1.3	0.149	1.8
South	0.086	1.3	-0.095	-1.3
West	-0.047	-0.6	-0.230	-2.5
High school measures				
Ability	0.0044	3.7	0.0015	1.2
Percentile rank in class	-0.0006	-0.5	0.0037	2.7
Academic program	-0.077	-1.1	-0.175	-2.3
Vocational-technical program	0.132	2.0	0.031	0.4
Family background				
Father's education	-0.0047	-0.4	0.0242	1.7
Mother's education	0.0513	3.0	0.0098	0.5
Father's occupation (SEI)	-0.0012	-0.9	0.0009	0.6
Mother's professional status	0.005	0.1	-0.097	-1.0
Postsecondary track (1972)				
4-year student	0.207	2.6	-0.117	-1.3
2-year student	0.305	3.5	0.146	1.6
Vocational-technical student	0.221	2.3	0.354	2.7
Military	-0.351	-0.7	0.614	4.4
Homemaker	0.157	1.3		
Unemployed	-0.014	-0.1	-0.122	-0.9
Marital status (1976)				
Months since first marriage	-0.0026	-1.1	-0.0005	-0.1
Married	-0.587	-6.7	-0.256	-2.5
Divorced, widowed, or separated	-0.153	-1.1	-0.016	-0.1
Expecting to be married	-0.476	-5.2	-0.123	-1.2
Parenthood				
Parent by October 1973	-0.012	-0.1	-0.175	-0.9
Parent Nov. 1973 to Oct. 1974	-0.151	-1.4	-0.269	-1.7
Parent Nov. 1974 to Oct. 1976	-0.274	-3.2	-0.376	-3.4
Expecting parenthood, 1976	-0.221	-2.0	-0.539	-3.9
Two or more children, 1976	0.015	0.1	0.256	1.6
R^2	0.061		0.033	
S	1.826		2.000	
F	11.2		5.7	
N	5382		5025	

tions whose educations are terminated early for reasons other than early parenthood.

Because of the many difficulties associated with this approach and the impossibility of separating the effects of marriage and parenthood from the effects of other intervening factors, we shall report the results of the analysis of covariance only for a subset of the outcome measures that will be treated in later sections.

REMAINING QUESTIONS

In analyzing the effects of early family formation on educational plans and attainments, we have assumed that the individual effects can be estimated by comparing changes over time in the individual's outcome measures with estimates of the expected changes for that individual based upon observations on individuals with similar characteristics in a control group. Thus, the estimates of the average effects reported in this section represent average deviations from the observed pattern among individuals in a control group. However, the methodology itself cannot reveal the underlying reasons for the effects—and the labeling of these differences as "effects" is still open to debate.

The use of the word "effects" in this context is somewhat misleading in that it suggests that early family formation is the direct cause of the observed reductions in educational attainment and aspirations that have been demonstrated. Although this cause-and-effect relationship surely exists for some individuals, we cannot know whether the observed differences associated with family formation are actually *consequences* of early marriage or whether, in fact, they result from other factors.

Why should early family formation have any effect on educational plans and attainment? So far, we have emphasized the viewpoint that married teenagers and early parents often confront financial problems and difficulties in arranging child care that constitute barriers to higher education. For such individuals, reductions in educational plans are direct consequences of marriage and parenthood.

However, we doubt that the cause-and-effect relationship between family formation and educational patterns is ordinarily that clear-cut. First, the decision to marry or become a parent is not typically forced on the teenager but represents a conscious choice. That is, early family formation should not be viewed exclusively as an externally imposed burden that limits a teenager's life. Second, although family responsibilities may temporarily interfere with young people's immediate plans, only rarely will they preclude later educational opportunities. Thus, long-term educational aspirations should not necessarily be affected by early family formation. To the contrary, some married teenagers may become more motivated to complete college and seek professional careers.

If we accept, for the moment, the premise that early family formation

imposes no insuperable barriers to higher education for most teenagers, how can one explain the negative effects on educational aspirations that have been reported? Here are some possible alternative explanations:

- For many teenagers, educational plans are linked to definite career goals. For some, the responsibilities of marriage and parenthood require modification of career goals, perhaps to increase current income at the expense of (uncertain) later gains achieved through further education. For these individuals whose educational plans are tied to career plans, reductions in educational goals are indirect consequences of changes in career goals.
- At the opposite extreme, some teenagers' educational plans are only remotely tied to career plans, if at all. For many young people, college attendance represents a process of acculturation and maturation that affords an ever-changing mixture of satisfactions and frustrations. For those whose reasons for attending college are nebulous, college attendance represents a "holding pattern" between adolescence and adulthood, and marriage may simply mark the end of the formation period.
- Between the two extremes above are those teenagers whose career and educational plans are tenuously linked and are, perhaps unknown to them, contingent upon marriage plans and the development of other relationships. Consider a hypothetical case of a girl whose career plans as a senior are to become a teacher (if she remains single) or a homemaker (if she marries), depending on whether she finds a suitable marriage partner. Let us suppose that she plans to complete six years of college if she does not marry, but to quit if she does. Even if she can assign probabilities to the two career paths, it is not clear how she might answer the survey question, "As things stand now, how far in school do you think you actually will get?" In cases like this (which are probably more common than the extreme cases listed above), apparent changes in career goals and reductions in educational aspirations may not represent changes in plans at all but simply realizations of plans that depend on future contingencies. Here marriage, instead of being an impediment to higher education, marks the entrance into a preferred career path that happens to entail less postsecondary education.
- Section VII will show that the NLS participants, as a group, had unrealistically high career aspirations as seniors. Early marriage or parenthood may represent a sobering transition that leads to a more mature and realistic appraisal. If so, reductions in educational aspirations associated with early family formation may simply reflect new and more mature self-assessments in the face of new responsibilities.

These alternative explanations for the reductions in educational plans associated with early family formation depend on the student's reasons for attending college and on the strength of the linkage between educational goals and career goals. Section VII sheds light on this issue by considering the effects of early family formation on career development.

VII. CAREER DEVELOPMENT

THE CAREER ASPIRATION INDEX

For analyzing the long-term consequences of parenthood upon career development, we developed a career aspirations index CARASP to facilitate measuring shifts in aspirations over time. The key question on the follow-up surveys related to career goals asked, "What kind of work will you be doing when you are 30 years old?" The possible responses consisted of the occupational categories listed in Table 7.1. The questionnaire described each category by listing a number of occupations that it includes. (Examples appear in the footnotes to Table 7.1.)

The values of CARASP are given in the second column of Table 7.1. The index is derived using canonical correlation between the (indicator variables for) 1973 occupational aspirations and a set of background factors (ability, student performance, and socioeconomic measures) that are known to be related to career choices. The derivation of CARASP is explained in App. E.

The third column gives average Duncan SEI scores for selected subsets of occupations from those categories as reported by Levinsohn et al. (1978). Although the two measures are highly correlated (0.92 for males, 0.81 for females), CARASP has some advantages over the average Duncan SEI scores. For one thing, CARASP is more complete in that it provides scores for homemakers and military occupations. Secondly, it circumvents the problems associated with weighting the individual Duncan SEI scores to provide a suitable "average" score for the occupational category. Thirdly, the Duncan SEI scores for individual occupations are themselves suspect (e.g., dentists have higher Duncan SEI scores than physicians, stenographers are rated higher than registered nurses). As the latter example illustrates, the Duncan SEI scores tend to give high scores to clerical personnel and salespersons. Note the relatively high average scores for the clerical and sales categories in Table 7.1.

Unfortunately, the question on the Base Year Questionnaire on career aspirations was worded somewhat differently from the questions on the follow-up surveys. The base year question was listed under the caption "Plans for the future . . ." and asked the respondent to select the occupational category "that goes with the best description of the kind of work you would like to do." Unlike the follow-up questions, which asked the respondent to report what he or she expected to be doing at a particular age (30), the base year question is indefinite. Also, the base year question combined the three professional categories denoted by "Professional I," "Professional II," and "School Teacher" in Table 7.1 into a single "Professional" category. The CARASP value for that combined group was taken to be 70, which is approximately the average Duncan SEI score for occupations in that category.

Because of the possible shortcomings of this measure and our interest in

Table 7.1

VALUES OF THE CAREER ASPIRATION INDEX AND AVERAGE DUNCAN SEI SCORES FOR OCCUPATIONAL CATEGORIES

Occupational Category	Career Aspiration Index	Average Duncan SEI Score	1973 Counts	
			Female	Male
Professional I[a]	80	80	687	1357
Professional II[b]	64	71	2223	1813
School Teacher	63	67	968	379
Manager	49	68	277	887
Military	48	—	28	187
Proprietor	42	50	80	486
Technical	40	60	373	688
Sales	38	54	135	186
Homemaker	36	—	2451	7
Clerical	35	57	1927	162
Farmer	33	28	76	325
Protective	31	38	37	335
Service	25	16	347	40
Craftsman	24	27	64	1564
Operative	15	19	98	520
Laborer	10	7	20	425

SOURCE: Average Duncan SEI scores are from Levinsohn et al. (1978), except the scores for the first three categories, which were calculated using a similar method.

NOTE: Derivation of the career aspiration index is described in App. E.

[a]Category examples include clergyman, dentist, lawyer, physician, scientist, college teacher.

[b]Category examples include accountant, artist, writer, registered nurse, engineer, librarian, social worker, actor, actress, athlete, politician, but not public school teacher.

detecting possible shifts away from professional aspirations and toward homemaking careers, the analysis of the CARASP measures will be supplemented by analogous analyses of the PROASP and HOMASP measures. These are indicator variables for respondents who chose, respectively, the professional and homemaker categories in reporting their career aspirations.

CHANGES IN CAREER ASPIRATIONS

Table 7.2 gives the mean values of the CARASP measures for the four waves of the survey. As the first column indicates, there were substantial differences across the marital/parenthood categories in 1972, when most of the NLS participants were still seniors and few of them had married or become parents. For the most part, these differences persisted through the four years without large changes, except in the categories with small sample sizes.

Table 7.2

Mean Values of the Career Aspiration Measures by Marital and Parenthood Status

Parenthood Status as of October 1976	Sample Means				Sample Sizes			
	1972	1973	1974	1976	1972	1973	1974	1976
SINGLE FEMALES								
Nonparents	56.0	53.6	53.3	52.4	2714	3901	3966	4136
Parents	48.2	44.0	43.9	43.6	151	367	379	400
After 10/74	49.4	43.1	44.6	42.0	58	145	138	161
11/73-10/74	48.2	45.4	44.3	44.7	53	119	133	136
Before 10/73	46.5	43.6	42.4	44.5	40	103	108	103
Prob. 6/72-10/73	46.9	42.8	41.6	44.7	16	63	65	63
Prob. before 6/72	46.2	44.9	43.8	44.3	24	40	43	40
EVER MARRIED FEMALES								
Norparents	50.6	46.1	45.5	45.0	1746	2505	2520	2670
Parents	44.0	40.8	40.0	39.9	1388	2309	2341	2417
After 10/74	46.2	42.0	40.2	39.6	622	977	991	1045
11/73-10/74	42.6	39.9	39.7	40.1	333	607	601	590
Before 10/73	41.8	40.1	40.2	40.1	385	702	678	681
Prob. 6/72-10/73	42.4	39.6	39.7	40.0	260	495	481	480
Prob. before 6/72	40.6	41.1	41.4	40.4	125	207	197	201
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	53.4	49.2	48.2	46.8	910	1265	1292	1342
Parents	47.7	45.4	42.5	41.1	178	317	315	333
11/73 to 10/74								
Nonparents	50.3	44.2	43.3	43.9	363	554	543	585
Parents	46.6	41.7	39.7	40.0	297	458	470	489
6/72 to 10/73								
Nonparents	45.9	42.0	42.1	42.6	414	591	598	645
Parents	43.1	39.6	39.7	39.3	741	1209	1226	1255
Before 6/72								
Nonparents	41.1	40.6	43.3	42.8	52	83	83	91
Parents	39.3	39.6	39.5	40.3	170	319	324	334
SINGLE MALES								
Nonparents	51.0	50.6	50.5	48.3	3308	5086	5139	5507
Parents	47.3	44.3	43.1	40.9	93	195	197	219
After 10/74	46.1	43.5	43.1	40.3	57	108	102	123
11/73-10/74	45.0	44.9	43.5	41.1	30	64	75	72
Before 10/73	70.0	46.3	41.9	43.7	6	23	20	24
EVER MARRIED MALES								
Nonparents	44.6	43.8	42.7	41.0	1182	1765	1801	1951
Parents	37.2	35.8	35.0	34.6	776	1435	1406	1538
After 10/74	38.1	36.8	35.9	35.1	426	749	747	823
11/73-10/74	36.8	35.1	32.7	34.5	168	349	342	337
Before 10/73	35.4	34.5	34.8	33.6	137	315	268	293
Prob. 6/72-10/73	36.5	35.8	35.9	34.3	103	246	211	226
Prob. before 6/72	32.2	29.8	30.7	31.2	34	69	57	67
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	45.7	45.8	44.8	42.1	771	1140	1154	1254
Parents	39.8	38.5	36.8	35.5	188	322	339	370
11/73 to 10/74								
Nonparents	44.4	42.1	40.7	40.1	250	369	387	410
Parents	36.7	36.4	34.7	34.9	218	379	380	420
6/72 to 10/73								
Nonparents	39.6	37.7	36.7	37.4	152	236	247	273
Parents	36.6	34.7	34.3	34.7	315	613	578	625
Before 6/72								
Nonparents	26.3	36.3	33.8	38.6	4	10	10	9
Parents	32.3	33.0	33.1	30.0	53	117	103	120

Scanning across the four years, we see that the NLS participants tend to reduce their career aspirations over time. It will be seen later in this section that an inordinate number of NLS participants, as high school seniors, planned to be professionals. Since their aspirations may often have been unrealistically high to begin with, this downward trend represents a shift toward greater realism, albeit not a substantial one.

An exception to the general downward trend is the group of NLS participants who married before June 1972. Perhaps their overall gains in career aspirations between 1972 and 1976 represent a recovery of earlier reductions due to the earlier effects of adolescent marriage and parenthood.

Tables 7.3, 7.4, and 7.5 provide the adjusted means and intergroup differences analogous to those reported in Sec. VI for educational aspirations. The regression equations used in calculating the adjusted means are given in App. D. The set of independent variables is the same as that used in analyzing educational aspirations except that the variables SIBS, SIBSCOLL, and PALSCOLL have been omitted.

The average effects of marriage and parenthood on career aspirations, which can be estimated from the entries in Tables 7.3 and 7.4 for the two control groups, are quite small relative to the standard deviations of these measures given in Table 3.2. For the 1973 CARASP measures, the standard deviations were 16.3 for women and 21.4 for men.

For women, the average effects of early family formation on career aspirations appear to be small. There is a small overall negative effect associated with early marriage. This is most readily apparent from the entries in Table 7.4 for women who married between November 1973 and October 1974. The average effects of family formation between 1972 and 1974 for these women were −4.6 units for the nonmothers and −4.9 units for the mothers. The overall marriage effects seem to be smaller for those who married before October 1973, but for this group the 1972 measures may have already been affected by marital plans. Also, the estimates of marriage effects may be somewhat distorted by the changes in the wording of the questions on career aspirations between the base year and follow-up surveys. The effects of early parenthood are not readily apparent from either Table 7.4 or 7.5.

The analysis of covariance reported in Table 7.6, using the change in the CARASP measures between 1972 and 1976 as the dependent variable, indicates some statistically significant effects of early family formation, but these effects are small in magnitude relative to the standard error estimated from the regression equation (18.1 for women, 21.5 for men). For women, the estimated average effect of marriage upon the change in CARASP between 1972 and 1976 is −4.9 units. The highly significant positive effect of 4.5 units associated with being in a vocational-technical program should not be considered a positive effect upon career aspirations between 1972 and 1976 but a negative effect upon career aspirations in 1972. As can be seen from the regression equations in App. D, senior girls in vocational-technical programs had much lower career aspirations—ten units lower on the CARASP scale—after allowing for differences in ability, socioeconomic status (SES), and other background factors. The regres-

Table 7.3

Adjusted Mean Values of the Career Aspiration Measures by Marital and Parenthood Status

Parenthood Status as of October 1976	Adjusted Means				Standard Errors			
	1972	1973	1974	1976	1972	1973	1974	1976
SINGLE FEMALES								
Nonparents	56.0	53.6	53.3	52.4	0.3	0.2	0.2	0.2
Parents	56.1	49.8	49.8	49.2	1.3	0.9	0.9	0.8
After 10/74	57.4	49.5	51.0	48.2	2.0	1.3	1.3	1.2
11/73-10/74	55.6	50.5	49.4	49.6	2.1	1.4	1.3	1.3
Before 10/73	54.9	49.6	48.6	50.5	2.4	1.5	1.5	1.5
Prob. 6/72-10/73	56.2	50.0	48.9	51.8	3.8	1.9	1.9	1.9
Prob. before 6/72	53.9	49.9	48.9	49.3	3.1	2.3	2.3	2.3
EVER MARRIED FEMALES								
Nonparents	54.1	49.3	48.6	48.0	0.4	0.3	0.3	0.3
Parents	51.3	47.4	46.5	46.1	0.5	0.4	0.4	0.4
After 10/74	52.6	47.9	45.9	45.2	0.6	0.5	0.5	0.5
11/73-10/74	50.8	47.1	46.9	47.1	0.9	0.6	0.6	0.6
Before 10/73	49.6	46.9	47.0	46.7	0.8	0.6	0.6	0.6
Prob. 6/72-10/73	50.0	46.3	46.3	46.3	1.0	0.7	0.7	0.7
Prob. before 6/72	48.8	48.1	48.4	47.2	1.4	1.0	1.1	1.1
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	55.1	51.0	49.8	48.4	0.5	0.4	0.4	0.4
Parents	53.6	50.4	47.5	45.9	1.1	0.8	0.8	0.8
11/73 to 10/74								
Nonparents	54.1	47.7	46.6	47.1	0.8	0.6	0.6	0.6
Parents	53.5	47.8	45.8	46.0	0.9	0.7	0.7	0.7
6/72 to 10/73								
Nonparents	52.0	47.5	47.4	47.8	0.8	0.6	0.6	0.6
Parents	50.5	46.3	46.3	45.8	0.6	0.5	0.5	0.5
Before 6/72								
Nonparents	49.8	48.2	50.7	49.9	2.1	1.6	1.6	1.6
Parents	47.9	47.2	47.1	47.8	1.2	0.9	0.9	0.8
SINGLE MALES								
Nonparents	51.0	50.6	50.5	48.3	0.3	0.2	0.2	0.2
Parents	51.6	49.8	48.7	45.4	2.0	1.4	1.4	1.3
After 10/74	50.8	49.4	48.9	45.0	2.5	1.8	1.8	1.6
11/73-10/74	48.1	48.9	47.5	44.3	3.3	2.3	2.1	2.1
Before 10/73	76.1	54.6	50.3	50.3	7.4	3.7	4.0	3.6
EVER MARRIED MALES								
Nonparents	47.8	47.7	46.4	44.4	0.5	0.4	0.4	0.4
Parents	44.5	44.7	43.4	42.4	0.7	0.5	0.5	0.5
After 10/74	44.7	44.7	43.5	42.2	0.9	0.7	0.7	0.6
11/73-10/74	44.4	44.7	41.8	42.9	1.4	1.0	1.0	1.0
Before 10/73	43.6	44.3	44.3	42.3	1.6	1.0	1.1	1.1
Prob. 6/72-10/73	44.0	45.0	44.7	42.5	1.8	1.2	1.3	1.2
Prob. before 6/72	42.3	41.5	42.2	41.6	3.1	2.2	2.4	2.2
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	48.0	48.6	47.4	44.5	0.7	0.5	0.5	0.5
Parents	45.8	45.8	43.9	42.0	1.3	1.0	1.0	0.9
11/73 to 10/74								
Nonparents	48.1	46.6	44.9	44.1	1.2	0.9	0.9	0.9
Parents	44.0	45.3	43.0	42.5	1.3	0.9	0.9	0.9
6/72 to 10/73								
Nonparents	46.2	45.6	44.3	44.6	1.5	1.2	1.2	1.1
Parents	44.0	43.8	43.0	42.8	1.1	0.8	0.8	0.7
Before 6/72								
Nonparents	30.5	42.6	39.7	44.5	9.0	5.6	5.7	5.9
Parents	42.4	44.8	44.5	40.5	2.5	1.7	1.8	1.6

Table 7.4

Intergroup Differences in Adjusted Means for the Career Aspiration Measures

Parenthood Status as of October 1976	Differences from Single nonparents				Standard Errors			
	1972	1973	1974	1976	1972	1973	1974	1976
SINGLE FEMALES								
Nonparents	----	----	----	----	----	----	----	----
Parents	0.0	-3.8	-3.5	-3.2	1.3	0.9	0.9	0.9
After 10/74	1.3	-4.1	-2.3	-4.3	2.0	1.3	1.3	1.2
11/73-10/74	-0.4	-3.1	-3.8	-2.8	2.1	1.4	1.4	1.3
Before 10/73	-1.2	-4.0	-4.6	-1.9	2.4	1.5	1.5	1.5
Prob. 6/72-10/73	0.1	-3.6	-4.4	-0.6	3.8	1.9	1.9	1.9
Prob. before 6/72	-2.1	-3.7	-4.4	-3.2	3.1	2.3	2.3	2.4
EVER MARRIED FEMALES								
Nonparents	-2.0	-4.2	-4.6	-4.4	0.5	0.4	0.4	0.4
Parents	-4.8	-6.2	-6.7	-6.3	0.6	0.4	0.4	0.4
After 10/74	-3.5	-5.7	-7.4	-7.3	0.7	0.5	0.6	0.5
11/73-10/74	-5.3	-6.4	-6.3	-5.3	0.9	0.7	0.7	0.7
Before 10/73	-6.4	-6.7	-6.3	-5.8	0.9	0.6	0.6	0.6
Prob. 6/72-10/73	-6.1	-7.3	-6.9	-6.1	1.0	0.7	0.7	0.7
Prob. before 6/72	-7.2	-5.4	-4.8	-5.2	1.4	1.1	1.1	1.1
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	-0.9	-2.6	-3.4	-4.0	0.6	0.5	0.5	0.5
Parents	-2.5	-3.1	-5.8	-6.5	1.2	0.9	0.9	0.8
11/73 to 10/74								
Nonparents	-2.0	-5.9	-6.6	-5.3	0.8	0.7	0.7	0.7
Parents	-2.5	-5.7	-7.4	-6.4	0.9	0.7	0.7	0.7
6/72 to 10/73								
Nonparents	-4.1	-6.1	-5.8	-4.6	0.8	0.7	0.7	0.6
Parents	-5.5	-7.2	-7.0	-6.7	0.7	0.5	0.5	0.5
Before 6/72								
Nonparents	-6.2	-5.4	-2.6	-2.5	2.1	1.6	1.7	1.6
Parents	-8.2	-6.3	-6.2	-4.6	1.2	0.9	0.9	0.9
SINGLE MALES								
Nonparents	----	----	----	----	----	----	----	----
Parents	0.6	-0.8	-1.8	-3.0	2.0	1.4	1.4	1.3
After 10/74	-0.2	-1.2	-1.5	-3.3	2.5	1.8	1.8	1.7
11/73-10/74	-2.9	-1.7	-2.9	-4.0	3.4	2.3	2.1	2.1
Before 10/73	25.2	4.0	-0.2	2.0	7.4	3.7	4.0	3.6
EVER MARRIED MALES								
Nonparents	-3.2	-2.9	-4.1	-3.9	0.6	0.5	0.5	0.5
Parents	-6.5	-5.9	-7.0	-5.9	0.8	0.6	0.6	0.6
After 10/74	-6.3	-5.9	-7.0	-6.1	1.0	0.7	0.7	0.7
11/73-10/74	-6.6	-5.9	-8.6	-5.5	1.5	1.0	1.0	1.0
Before 10/73	-7.4	-6.3	-6.2	-6.0	1.6	1.1	1.1	1.1
Prob. 6/72-10/73	-7.0	-5.6	-5.8	-5.9	1.8	1.2	1.3	1.2
Prob. before 6/72	-8.7	-9.1	-8.2	-6.8	3.1	2.2	2.4	2.2
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	-3.0	-2.0	-3.1	-3.8	0.7	0.6	0.6	0.6
Parents	-5.2	-4.8	-6.6	-6.3	1.4	1.0	1.0	1.0
11/73 to 10/74								
Nonparents	-2.9	-4.0	-5.6	-4.2	1.2	1.0	1.0	0.9
Parents	-6.9	-5.3	-7.5	-5.8	1.3	1.0	1.0	0.9
6/72 to 10/73								
Nonparents	-4.8	-5.0	-6.2	-3.7	1.5	1.2	1.2	1.1
Parents	-6.9	-6.8	-7.4	-5.5	1.1	0.8	0.8	0.8
Before 6/72								
Nonparents	-20.4	-8.0	-10.8	-3.8	9.0	5.6	5.7	5.9
Parents	-8.6	-5.8	-6.0	-7.3	2.5	1.7	1.8	1.7

Table 7.5

Results of the Analysis of the Career Aspiration Measures for NLS Respondents Who Were Married as of October 1973

Parenthood Status as of October 1976	Sample Means				Sample Sizes			
	1972	1973	1974	1976	1972	1973	1974	1976
FEMALES								
Nonparents	45.4	41.8	42.2	42.7	466	674	681	736
Parents	42.4	39.6	39.6	39.6	911	1528	1550	1589
After 10/74	43.5	40.1	39.0	38.5	273	427	443	462
11/73-10/74	41.7	38.9	39.5	39.7	247	460	438	436
Before 10/73	42.0	39.9	40.3	40.2	347	627	600	606
Prob. 6/72-10/73	42.7	39.5	39.9	40.0	235	444	425	429
Prob. before 6/72	40.5	40.8	41.1	40.5	112	183	175	177
MALES								
Nonparents	39.2	37.6	36.5	37.5	156	246	257	282
Parents	36.0	34.5	34.1	34.0	368	730	681	745
After 10/74	34.8	34.4	35.1	35.4	98	187	181	199
11/73-10/74	38.3	34.8	32.3	33.2	103	234	206	207
Before 10/73	35.2	34.3	34.6	33.6	132	296	249	274
Prob. 6/72-10/73	36.4	35.5	35.8	34.3	99	230	194	210
Prob. before 6/72	31.8	30.1	30.3	31.5	33	66	55	64

Parenthood Status as of October 1976	Adjusted Means				Standard Errors			
	1972	1973	1974	1976	1972	1973	1974	1976
FEMALES								
Nonparents	45.4	41.8	42.2	42.7	0.7	0.5	0.5	0.5
Parents	42.4	40.0	39.9	39.9	0.6	0.4	0.4	0.4
After 10/74	43.8	40.5	39.2	38.7	0.9	0.6	0.6	0.6
11/73-10/74	42.2	39.7	40.2	40.5	1.1	0.6	0.7	0.7
Before 10/73	41.3	40.0	40.1	40.3	1.0	0.6	0.7	0.7
Prob. 6/72-10/73	42.3	39.6	39.8	40.2	1.1	0.7	0.7	0.7
Prob. before 6/72	39.1	40.7	40.7	40.4	1.7	1.1	1.1	1.2
MALES								
Nonparents	39.2	37.6	36.5	37.5	1.4	1.2	1.1	1.0
Parents	38.2	35.8	35.4	35.6	1.2	0.9	0.9	0.8
After 10/74	35.7	34.5	35.3	35.8	1.8	1.4	1.3	1.3
11/73-10/74	40.2	36.1	33.7	35.1	1.9	1.4	1.3	1.3
Before 10/73	37.9	36.2	36.2	35.7	1.9	1.4	1.4	1.3
Prob. 6/72-10/73	38.4	37.0	36.8	35.7	2.1	1.5	1.5	1.4
Prob. before 6/72	36.3	33.4	33.7	35.4	3.3	2.6	2.6	2.4

Parenthood Status as of October 1976	Differences from Married Nonparents				Standard Errors			
	1972	1973	1974	1976	1972	1973	1974	1976
FEMALES								
Nonparents	----	----	----	----	----	----	----	----
Parents	-2.9	-1.7	-2.4	-2.7	0.9	0.6	0.6	0.6
After 10/74	-1.5	-1.3	-3.1	-4.0	1.2	0.8	0.8	0.8
11/73-10/74	-3.1	-2.1	-2.0	-2.1	1.3	0.8	0.8	0.8
Before 10/73	-4.1	-1.8	-2.1	-2.4	1.2	0.8	0.8	0.8
Prob. 6/72-10/73	-3.1	-2.2	-2.4	-2.4	1.3	0.8	0.9	0.9
Prob. before 6/72	-6.2	-1.1	-1.6	-2.3	1.8	1.2	1.2	1.3
MALES								
Nonparents	----	----	----	----	----	----	----	----
Parents	-1.1	-1.8	-1.1	-1.8	1.8	1.5	1.4	1.3
After 10/74	-3.6	-3.1	-1.3	-1.7	2.3	1.8	1.7	1.6
11/73-10/74	1.0	-1.5	-2.9	-2.4	2.3	1.8	1.7	1.7
Before 10/73	-1.4	-1.4	-0.3	-1.8	2.4	1.8	1.8	1.7
Prob. 6/72-10/73	-0.8	-0.6	0.3	-1.7	2.5	1.9	1.8	1.7
Prob. before 6/72	-3.0	-4.2	-2.8	-2.1	3.6	2.8	2.8	2.6

Table 7.6

Regression Results for the Change in Career Aspirations Between 1972 and 1976

Variable	Females		Males	
	b	t	b	t
Constant	-4.32	-1.6	-2.67	-0.8
Race/ethnicity				
Black	2.128	2.6	1.819	1.7
Hispanic	3.203	2.5	-0.194	-0.1
Indian	2.334	1.0	0.871	0.3
Oriental	2.024	0.8	-2.176	-0.8
Other minority	1.950	1.2	2.314	1.2
Region				
Northeast	-0.475	-0.7	-0.126	-0.1
South	-0.410	-0.6	-1.014	-1.3
West	-1.801	-2.3	-2.535	-2.6
High school measures				
Ability	0.0017	0.1	-0.0064	-0.5
Percentile rank in class	0.0084	0.7	0.0350	2.4
Academic program	-2.104	-3.2	-1.993	-2.5
Vocational-technical program	4.540	7.2	1.376	1.6
Family background				
Father's education	-0.088	-0.7	0.397	2.5
Mother's education	0.228	1.4	0.051	0.3
Father's occupation (SEI)	0.0301	2.3	0.0021	0.1
Mother's professional status	-0.624	-0.7	-1.374	-1.2
Mother's homemaker status	-0.204	-0.4	-1.229	-1.8
Postsecondary track (1972)				
4-year student	-2.657	-3.4	-3.300	-3.5
2-year student	-2.156	-2.6	-1.575	-1.6
Vocational-technical student	1.145	1.2	1.206	0.9
Military	7.326	1.4	-0.445	-0.3
Homemaker	0.623	0.5		
Unemployed	-1.845	-2.0	-3.126	-2.3
Marital status (1976)				
Months since first marriage	0.0554	2.4	0.0227	0.6
Married	-4.948	-5.9	-2.293	-2.1
Divorced, widowed, or separated	-2.560	-1.9	-2.184	-1.0
Expecting to be married	-2.380	-2.7	-1.814	-1.7
Parenthood				
Parent by October 1973	-1.724	-1.4	-3.525	-1.6
Parent Nov. 1973 to Oct. 1974	-1.274	-1.2	-2.470	-1.4
Parent Nov. 1974 to Oct. 1976	-2.884	-3.5	-0.793	-0.7
Expecting parenthood, 1976	-1.807	-1.7	-1.138	-0.8
Two or more children, 1976	1.623	1.5	1.433	0.8
R^2	0.043		0.015	
S	18.092		21.514	
F	7.9		2.5	
N	5713		5119	

sion equations indicate that the negative effect associated with being in vocational-technical programs lessened over time.

Although the average effects of early family formation are small, this does not mean that no large shifts occurred in career aspirations. It may be that some large shifts downward on the CARASP scale associated with early parenthood (say, from school teacher to homemaker) are counteracted by shifts upward (say, from service occupations to homemaker).

PROFESSIONAL ASPIRATIONS

It was expected that the effects of family formation on educational and career aspirations would be most pronounced for those NLS participants who held very high educational aspirations and especially for those who hoped to enter the professions. This is one reason for using the indicators of professional aspirations as dependent variables in our analysis. A second reason is that, in analyzing career aspirations, we were concerned about the comparability of the 1972 measures with those determined from the follow-up surveys; this is less of a problem when only the professsional categories are considered. A third reason is that a shift to homemaker aspirations, as measured on the CARASP scale, represents a shift toward the mean for most women, and the calculation of average effects on that scale can mask important shifts in career goals.

The professional category under consideration here is overinclusive, in that it includes social workers, librarians, artists, athletes, and actors, as well as doctors, lawyers, and other traditional professions. The footnotes in Table 7.1 list the occupations that were included on the survey questionnaires to describe the professional categories. The "schoolteacher" category has been included in the professional category for the follow-up surveys to make the resulting category comparable to the professional category in the base year survey.

From Table 3.2, we note that fully 47 percent of the female NLS participants and 41 percent of the males reported having professional aspirations when they were seniors in 1972. Since only about ten percent of the civilian labor force in 1970 had occupations that were classified as "professional, technical, and kindred workers," these figures can be regarded as unrealistically high, even after allowance is made for the inclusiveness of the "professional" category as used here.

Tables 7.7 to 7.10 provide the summary statistics for our individual effects analysis of professional aspirations. The differences across the marital/parenthood categories are remarkably large, both before and after controlling for background factors. It is notable that there is a decline in the percentages and adjusted percentages over time, except for the groups of NLS participants who were married before June 1972.

The methodology for handling dichotomous variables is analogous to that for handling continuous variables; it is outlined in App. B. In this case, the average effects of family formation may be distorted slightly because of the use

Table 7.7

Percentages of Respondents with Professional Aspirations by Marital and Parenthood Status

Parenthood Status as of October 1976	Percentage				Sample Sizes			
	1972	1973	1974	1976	1972	1973	1974	1976
SINGLE FEMALES								
Nonparents	60.4	56.7	55.4	51.8	2714	3901	3966	4136
Parents	38.4	30.5	31.7	28.0	151	367	379	400
After 10/74	43.1	28.3	35.5	24.8	58	145	138	161
11/73-10/74	37.7	33.6	31.6	30.1	53	119	133	136
Before 10/73	32.5	30.1	26.9	30.1	40	103	108	103
Prob. 6/72-10/73	31.3	27.0	24.6	31.7	16	63	65	63
Prob. before 6/72	33.3	35.0	30.2	27.5	24	40	43	40
EVER MARRIED FEMALES								
Nonparents	45.2	34.9	32.8	29.9	1746	2505	2520	2670
Parents	27.2	18.9	17.2	16.9	1388	2309	2341	2417
After 10/74	33.3	22.4	16.6	16.4	622	977	991	1045
11/73-10/74	23.4	16.3	16.8	17.1	333	607	601	590
Before 10/73	21.3	16.7	18.4	17.8	385	702	678	681
Prob. 6/72-10/73	23.5	15.2	17.0	17.3	260	495	481	480
Prob. before 6/72	16.8	20.3	21.8	18.9	125	207	197	201
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	53.0	44.7	41.0	35.4	910	1265	1292	1342
Parents	37.6	33.8	23.8	23.1	178	317	315	333
11/73 to 10/74								
Nonparents	44.1	29.1	27.1	26.2	363	554	543	585
Parents	34.7	20.1	16.4	17.6	297	458	470	489
6/72 to 10/73								
Nonparents	32.1	21.5	20.9	22.6	414	591	598	645
Parents	25.1	15.4	16.2	14.7	741	1209	1226	1255
Before 6/72								
Nonparents	19.2	19.3	27.7	24.2	52	83	83	91
Parents	12.4	15.7	15.7	18.0	170	319	324	334
SINGLE MALES								
Nonparents	49.5	47.0	46.4	40.0	3308	5086	5139	5507
Parents	40.9	32.3	32.0	26.9	93	195	197	219
After 10/74	40.4	29.6	30.4	22.8	57	108	102	123
11/73-10/74	30.0	35.9	34.7	31.9	30	64	75	72
Before 10/73	100.0	34.8	30.0	33.3	6	23	20	24
EVER MARRIED MALES								
Nonparents	34.8	32.0	28.6	23.1	1182	1765	1801	1951
Parents	18.6	17.1	15.3	12.5	776	1435	1406	1538
After 10/74	20.2	18.7	15.8	13.1	426	749	747	823
11/73-10/74	17.9	16.0	13.7	11.3	168	349	342	337
Before 10/73	16.1	14.0	15.3	11.6	137	315	268	293
Prob. 6/72-10/73	17.5	15.0	15.2	12.4	103	246	211	226
Prob. before 6/72	11.8	10.1	15.8	9.0	34	69	57	67
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	37.4	35.6	32.9	25.1	771	1140	1154	1254
Parents	23.4	23.9	18.6	13.5	188	322	339	370
11/73 to 10/74								
Nonparents	34.0	28.5	22.5	19.8	250	369	387	410
Parents	17.0	16.9	15.8	12.9	218	379	380	420
6/72 to 10/73								
Nonparents	23.0	21.2	18.6	18.7	152	236	247	273
Parents	17.8	14.4	12.6	12.3	315	613	578	625
Before 6/72								
Nonparents	0.0	20.0	20.0	33.3	4	10	10	9
Parents	11.3	13.7	15.5	8.3	53	117	103	120

Table 7.8

Adjusted Percentages of Respondents with Professional Aspirations by Marital and Parenthood Status

Parenthood Status as of October 1976	Percentage				Standard Errors			
	1972	1973	1974	1976	1972	1973	1974	1976
SINGLE FEMALES								
Nonparents	60.4	56.7	55.4	51.8	0.9	0.8	0.8	0.8
Parents	66.2	50.0	51.4	45.8	4.2	2.7	2.7	2.6
After 10/74	71.0	49.2	56.5	43.8	6.7	3.9	4.2	3.6
11/73-10/74	64.2	50.8	49.4	46.1	6.9	4.5	4.3	4.2
Before 10/73	62.2	50.7	47.6	48.9	7.7	4.8	4.5	4.8
Prob. 6/72-10/73	63.9	51.3	48.5	53.4	12.1	5.8	5.6	6.1
Prob. before 6/72	60.7	52.4	48.0	44.0	10.0	7.8	7.3	7.3
EVER MARRIED FEMALES								
Nonparents	54.9	44.7	42.5	38.8	1.3	1.0	1.0	1.0
Parents	52.5	40.2	38.1	35.3	1.4	1.0	1.0	1.0
After 10/74	54.9	41.3	35.2	32.7	2.0	1.5	1.3	1.3
11/73-10/74	51.7	40.1	40.2	37.6	2.4	1.6	1.7	1.7
Before 10/73	48.6	38.8	40.3	37.0	2.2	1.6	1.6	1.6
Prob. 6/72-10/73	49.7	36.7	38.3	35.8	2.7	1.7	1.8	1.9
Prob. before 6/72	45.8	43.2	44.4	39.1	3.5	2.9	3.1	2.9
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	55.4	49.0	45.4	40.0	1.7	1.4	1.4	1.3
Parents	57.1	49.8	40.2	37.6	3.7	2.7	2.5	2.4
11/73 to 10/74								
Nonparents	54.8	39.7	37.7	35.8	2.7	2.0	2.0	1.9
Parents	58.4	40.2	36.1	35.2	2.8	2.0	1.8	1.8
6/72 to 10/73								
Nonparents	52.8	39.5	38.4	37.8	2.4	1.8	1.8	1.8
Parents	50.8	37.3	37.6	33.5	1.7	1.2	1.2	1.2
Before 6/72								
Nonparents	49.9	45.0	52.2	45.3	5.6	4.5	5.0	4.6
Parents	42.6	40.6	40.1	39.3	2.7	2.2	2.2	2.3
SINGLE MALES								
Nonparents	49.5	47.0	46.4	40.0	0.9	0.7	0.7	0.7
Parents	55.0	47.1	45.9	38.6	5.3	3.6	3.5	3.2
After 10/74	55.3	45.0	45.0	34.9	6.7	4.6	4.7	4.0
11/73-10/74	41.2	47.4	45.7	41.4	8.7	6.2	5.7	5.7
Before 10/73	(1)	55.5	49.1	49.0	(1)	10.2	10.6	9.9
EVER MARRIED MALES								
Nonparents	43.8	42.5	38.5	32.5	1.4	1.2	1.1	1.0
Parents	38.7	38.5	35.4	29.9	1.6	1.1	1.1	1.0
After 10/74	38.5	38.4	34.3	29.3	2.1	1.5	1.4	1.3
11/73-10/74	39.1	38.9	35.1	29.7	3.1	2.1	2.0	1.8
Before 10/73	38.3	37.2	37.2	30.5	3.3	2.1	2.3	2.0
Prob. 6/72-10/73	38.3	37.1	35.9	30.4	3.8	2.4	2.6	2.3
Prob. before 6/72	37.8	36.7	41.1	30.3	5.7	3.8	4.9	3.6
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	43.6	43.2	40.2	32.2	1.8	1.4	1.4	1.2
Parents	40.3	42.3	35.9	28.7	3.2	2.4	2.2	1.9
11/73 to 10/74								
Nonparents	44.5	40.6	33.8	30.5	3.0	2.4	2.2	2.0
Parents	37.4	38.3	35.8	30.1	2.6	2.0	2.0	1.7
6/72 to 10/73								
Nonparents	41.4	41.1	37.3	35.3	3.5	2.7	2.6	2.4
Parents	38.2	36.2	33.3	30.2	2.3	1.5	1.5	1.4
Before 6/72								
Nonparents	(1)	37.0	35.9	48.8	(1)	13.4	13.4	16.7
Parents	37.5	40.5	41.0	30.1	4.5	3.3	3.7	2.7

(1) Not estimated

Table 7.9

Intergroup Differences in Adjusted Percentages of Respondents with Professional Aspirations

Parenthood Status as of October 1976	Differences from Single nonparents				Standard Errors			
	1972	1973	1974	1976	1972	1973	1974	1976
SINGLE FEMALES								
Nonparents	----	----	----	----	----	----	----	----
Parents	5.9	-6.7	-4.0	-6.0	4.3	2.8	2.8	2.7
After 10/74	10.7	-7.5	1.1	-8.0	6.7	4.0	4.3	3.7
11/73-10/74	3.9	-5.9	-6.0	-5.8	6.9	4.6	4.3	4.2
Before 10/73	1.9	-6.0	-7.8	-2.9	7.7	4.8	4.6	4.8
Prob. 6/72-10/73	3.6	-5.4	-6.9	1.5	12.1	5.9	5.6	6.1
Prob. before 6/72	0.4	-4.3	-7.4	-7.8	10.0	7.8	7.3	7.4
EVER MARRIED FEMALES								
Nonparents	-5.4	-12.0	-12.9	-13.0	1.6	1.3	1.3	1.2
Parents	-7.9	-16.5	-17.3	-16.5	1.7	1.3	1.3	1.3
After 10/74	-5.4	-15.5	-20.2	-19.1	2.2	1.7	1.5	1.5
11/73-10/74	-8.6	-16.6	-15.2	-14.2	2.6	1.8	1.8	1.9
Before 10/73	-11.8	-17.9	-15.1	-14.9	2.4	1.8	1.8	1.8
Prob. 6/72-10/73	-10.7	-20.1	-17.1	-16.0	2.9	1.9	2.0	2.0
Prob. before 6/72	-14.5	-13.5	-11.0	-12.7	3.6	3.0	3.2	3.0
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	-4.9	-7.7	-10.0	-11.8	1.9	1.6	1.6	1.5
Parents	-3.2	-6.9	-15.2	-14.2	3.8	2.8	2.6	2.5
11/73 to 10/74								
Nonparents	-5.6	-17.0	-17.7	-16.0	2.8	2.1	2.1	2.0
Parents	-1.9	-16.5	-19.3	-16.7	3.0	2.1	2.0	2.0
6/72 to 10/73								
Nonparents	-7.6	-17.2	-17.0	-14.0	2.6	2.0	1.9	1.9
Parents	-9.6	-19.4	-17.8	-18.3	2.0	1.5	1.5	1.4
Before 6/72								
Nonparents	-10.5	-11.8	-3.2	-6.5	5.7	4.5	5.1	4.7
Parents	-17.8	-16.1	-15.3	-12.5	2.9	2.3	2.3	2.4
SINGLE MALES								
Nonparents	----	----	----	----	----	----	----	----
Parents	5.5	0.0	0.0	-1.3	5.4	3.6	3.6	3.3
After 10/74	5.7	-2.0	-1.4	-5.0	6.8	4.6	4.8	4.0
11/73-10/74	-8.3	0.4	0.0	1.5	8.7	6.2	5.7	5.7
Before 10/73	(1)	8.5	2.7	9.0	(1)	10.3	10.6	9.9
EVER MARRIED MALES								
Nonparents	-5.8	-4.5	-7.9	-7.5	1.7	1.3	1.3	1.2
Parents	-10.9	-8.5	-10.9	-10.0	1.8	1.3	1.3	1.2
After 10/74	-11.0	-8.7	-12.1	-10.6	2.2	1.7	1.6	1.4
11/73-10/74	-10.4	-8.2	-11.2	-10.2	3.2	2.2	2.1	1.9
Before 10/73	-11.3	-9.8	-9.1	-9.4	3.4	2.2	2.4	2.1
Prob. 6/72-10/73	-11.2	-9.9	-10.5	-9.5	3.9	2.5	2.6	2.4
Prob. before 6/72	-11.7	-10.4	-5.2	-9.6	5.8	3.8	5.0	3.7
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	-6.0	-3.8	-6.2	-7.7	2.0	1.6	1.6	1.4
Parents	-9.3	-4.8	-10.5	-11.3	3.3	2.5	2.3	2.0
11/73 to 10/74								
Nonparents	-5.0	-6.5	-12.6	-9.4	3.2	2.5	2.3	2.1
Parents	-12.2	-8.7	-10.6	-9.8	2.8	2.1	2.1	1.9
6/72 to 10/73								
Nonparents	-8.1	-5.9	-9.1	-4.4	3.6	2.8	2.6	2.5
Parents	-11.4	-10.8	-13.1	-9.8	2.4	1.7	1.7	1.6
Before 6/72								
Nonparents	(1)	-10.1	-10.5	8.8	(1)	13.4	13.4	16.7
Parents	-12.1	-6.5	-5.4	-9.9	4.6	3.4	3.7	2.7

(1) Not estimated

Table 7.10

Results of the Analysis of Plans for Professional Careers for NLS Respondents Who Were Married as of October 1973

Parenthood Status as of October 1976	Percentage				Sample Sizes			
	1972	1973	1974	1976	1972	1973	1974	1976
FEMALES								
Nonparents	30.7	21.2	21.7	22.8	466	674	681	736
Parents	22.7	15.4	16.1	15.4	911	1528	1550	1589
After 10/74	26.0	17.1	13.3	12.1	273	427	443	462
11/73-10/74	20.2	13.0	15.8	15.6	247	460	438	436
Before 10/73	21.9	16.4	18.3	17.7	347	627	600	606
Prob. 6/72-10/73	24.3	15.1	17.2	17.0	235	444	425	429
Prob. before 6/72	17.0	19.7	21.1	19.2	112	183	175	177
MALES								
Nonparents	22.4	21.1	18.7	19.1	156	246	257	282
Parents	16.8	14.2	13.1	11.7	368	730	681	745
After 10/74	14.3	14.4	9.4	14.1	98	187	181	199
11/73-10/74	21.4	15.0	13.1	9.2	103	234	206	207
Before 10/73	15.9	13.5	15.7	11.7	132	296	249	274
Prob. 6/72-10/73	17.2	14.3	16.0	12.4	99	230	194	210
Prob. before 6/72	12.1	10.6	14.5	9.4	33	66	55	64

Parenthood Status as of October 1976	Adjusted Percentage				Standard Errors			
	1972	1973	1974	1976	1972	1973	1974	1976
FEMALES								
Nonparents	30.7	21.2	21.7	22.8	2.1	1.6	1.6	1.5
Parents	27.2	21.4	20.0	18.0	1.8	1.2	1.3	1.2
After 10/74	31.9	23.0	17.3	14.8	2.7	1.9	1.7	1.6
11/73-10/74	26.0	19.8	21.1	18.9	2.8	1.8	2.0	2.0
Before 10/73	23.9	21.3	20.9	19.4	2.7	1.9	2.0	2.0
Prob. 6/72-10/73	27.3	20.1	20.0	19.0	3.1	2.0	2.1	2.1
Prob. before 6/72	16.2	23.9	22.7	20.2	4.3	3.5	3.6	3.5
MALES								
Nonparents	22.4	21.1	18.7	19.1	3.4	2.6	2.4	2.3
Parents	31.4	22.5	19.2	19.0	2.5	1.9	1.8	1.7
After 10/74	26.1	20.2	15.2	20.0	3.7	2.7	2.3	2.6
11/73-10/74	35.3	23.2	18.9	16.4	4.4	2.7	2.7	2.3
Before 10/73	31.7	22.5	21.8	19.4	4.0	2.8	3.0	2.7
Prob. 6/72-10/73	32.2	22.8	21.1	19.2	4.4	3.0	3.2	2.9
Prob. before 6/72	29.9	21.3	23.2	19.4	6.5	4.6	5.4	4.3

Parenthood Status as of October 1976	Differences from Married Nonparents				Standard Errors			
	1972	1973	1974	1976	1972	1973	1974	1976
FEMALES								
Nonparents	----	----	----	----	----	----	----	----
Parents	-3.5	0.1	-1.7	-4.8	2.8	2.0	2.0	2.0
After 10/74	1.2	1.8	-4.5	-8.1	3.5	2.4	2.3	2.2
11/73-10/74	-4.7	-1.4	0.0	-3.9	3.5	2.4	2.5	2.5
Before 10/73	-6.8	0.1	0.0	-3.5	3.5	2.5	2.6	2.5
Prob. 6/72-10/73	-3.3	-1.1	-1.7	-3.9	3.8	2.5	2.6	2.6
Prob. before 6/72	-14.4	2.7	1.0	-2.6	4.8	3.8	3.9	3.8
MALES								
Nonparents	----	----	----	----	----	----	----	----
Parents	8.9	1.3	0.6	0.0	4.2	3.2	3.0	2.9
After 10/74	3.6	0.0	-3.4	0.9	5.0	3.8	3.4	3.5
11/73-10/74	12.8	2.1	0.2	-2.8	5.5	3.7	3.6	3.3
Before 10/73	9.3	1.4	3.1	0.3	5.2	3.8	3.9	3.6
Prob. 6/72-10/73	9.7	1.6	2.5	0.1	5.6	4.0	4.0	3.7
Prob. before 6/72	7.4	0.2	4.5	0.3	7.3	5.3	5.9	4.9

of some approximations, but the approximate average effects are again estimated from the changes in the intergroup differences reported in Table 7.9.

From that table, we can discern clear-cut reductions in professional aspirations for women associated with early family formation. For the most part, the effects are due to marriage. Among the single parents, there are also large reductions in professional aspirations due to parenthood, but the differences due to parenthood alone are small among the married parents. The latter point is clear from both Tables 7.9 and 7.10.

As was pointed out in Sec. VI, these effects may not be direct consequences of early family formation, but may be due to other factors. In this case, where the professional aspirations of the NLS seniors seem far out of line, the reductions in professional aspirations among married people may simply reflect greater maturity in recognizing that their career goals were too high to begin with.

HOMEMAKER ASPIRATIONS

Women's career choices are affected by their perceptions of their future roles as wives and mothers. For this reason, women's aspirations to be homemakers may influence their educational patterns and career goals long before they marry. Some women place primary importance on pursuing a career, with or without a separate commitment to familial roles; others seek to fulfill the more traditional roles of wife and mother.

During the past forty years, the pattern of women's participation in the labor force has undergone profound change. Before World War II, it was uncommon for married women to work. By 1978, however, 49 percent of all women were in the labor force, including 48 percent of all wives and 42 percent of all married women with preschool children.[1] Changes in women's labor force participation have had far-reaching social repercussions, and policymakers need to have a better understanding of how women make choices between homemaking and other careers. The NLS provides an important source of information on how a recent cohort of young women now in their mid-twenties are making their career choices. The long-range plans of these women are of special interest.

Table 7.11 shows the percentages of women who planned to become homemakers by marital/parenthood category. For 1973, 1974, and 1976, these percentages were determined from responses to the question, "What kind of work will you be doing when you are 30 years old?" The 1972 percentages, however, result from tabulating responses to an item that was listed under the caption "Plans for the future . . ." and asked the respondents to "circle the one number that goes with the best description of the kind of work you would like to do." Whereas only 6 percent of the senior girls chose the homemaker category on

[1]U.S. Bureau of the Census (1979a), p. 42.

Table 7.11

Percentages of Women Who Plan To Be Homemakers at Age 30 by Marital and Parenthood Status

Parenthood Status as of October 1976	Percentage				Sample Sizes			
	1972	1973	1974	1976	1972	1973	1974	1976
SINGLE FEMALES								
Nonparents	2.3	13.4	12.7	10.9	2714	3959	4032	4195
Parents	4.6	18.6	15.6	17.3	151	377	391	404
After 10/74	1.7	18.5	16.7	21.6	58	146	144	162
11/73-10/74	3.8	18.4	15.8	15.3	53	125	139	157
Before 10/73	10.0	18.9	13.9	13.3	40	106	108	105
Prob. 6/72-10/73	6.3	18.8	10.8	12.5	16	64	65	64
Prob. before 6/72	12.5	19.0	18.6	14.6	24	42	43	41
EVER MARRIED FEMALES								
Nonparents	5.7	27.6	30.2	31.8	1746	2564	2602	2739
Parents	12.8	40.2	42.2	37.5	1388	2376	2405	2469
After 10/74	7.9	42.0	46.0	40.7	622	1001	1025	1073
11/73-10/74	10.5	42.4	41.2	36.4	333	629	611	602
Before 10/73	21.0	35.1	36.6	32.5	385	723	697	692
Prob. 6/72-10/73	20.4	38.4	40.7	35.3	260	508	489	487
Prob. before 6/72	22.4	27.4	26.9	25.9	125	215	208	205
TIMING OF FIRST MARRIAGE								
After 10/74								
Nonparents	3.7	21.2	24.1	32.0	910	1290	1331	1376
Parents	5.1	27.8	35.1	36.6	178	320	325	339
11/73 to 10/74								
Nonparents	4.7	30.8	36.0	31.8	363	568	566	600
Parents	7.1	41.6	47.3	38.4	297	471	482	502
6/72 to 10/73								
Nonparents	9.4	37.5	38.3	31.3	414	608	616	664
Parents	13.0	43.7	43.4	38.3	741	1247	1255	1283
Before 6/72								
Nonparents	15.4	31.4	30.6	29.3	52	86	85	92
Parents	29.4	37.3	37.4	33.6	170	330	337	339

the base year survey, the figure jumped to 25 percent on the first follow-up survey and remained about the same (at 25 and 24 percent) on the second and third follow-up surveys.

Not surprisingly, the proportion of married women who expected to be homemakers at age 30 was significantly higher than the corresponding proportion for single women. Within marital status categories, the proportion of mothers who expected to be homemakers was higher than that for women who did not have children. Homemaker aspirations appear to be linked to the timing of first birth, in that the women who became mothers before June 1972 aspired to homemaking careers in considerably lower percentages than those who became mothers later. The pattern suggests that, during their first pregnancies and for a year or two after delivery, a higher proportion of the married women (but never a majority) plan to become homemakers at age 30, but the proportion declines somewhat as their children mature.

Table 7.12

ADJUSTED PERCENTAGES OF WOMEN WHO PLAN TO BE HOMEMAKERS AT AGE 30 BY MARITAL AND PARENTHOOD STATUS

Parenthood Status as of October 1976	Percentage				Standard Errors			
	1972	1973	1974	1976	1972	1973	1974	1976
SINGLE FEMALES								
Nonparents	2.3	13.4	12.7	10.9	0.3	0.5	0.5	0.5
Parents	5.1	20.5	17.3	18.9	1.8	2.2	2.0	2.1
After 10/74	2.2	18.9	16.9	22.1	1.8	3.3	3.2	3.3
11/73-10/74	4.4	21.6	18.5	17.8	2.7	3.6	3.3	3.2
Before 10/73	10.4	21.1	16.2	15.3	4.8	4.0	3.5	3.5
Prob. 6/72-10/73	6.6	19.2	11.4	13.0	6.3	5.0	4.0	4.3
Prob. before 6/72	13.0	22.5	22.1	17.7	6.9	6.2	6.1	5.7
EVER MARRIED FEMALES								
Nonparents	6.0	26.9	29.5	30.8	0.6	0.9	0.9	0.9
Parents	12.9	37.4	39.2	34.6	0.9	1.1	1.1	1.1
After 10/74	8.1	39.4	43.2	38.0	1.1	1.6	1.6	1.5
11/73-10/74	10.7	38.7	37.4	32.9	1.7	2.0	2.1	2.0
Before 10/73	21.3	33.0	34.3	30.1	2.1	1.8	1.9	1.8
Prob. 6/72-10/73	20.6	36.1	38.2	32.9	2.5	2.2	2.3	2.2
Prob. before 6/72	22.7	26.1	25.3	23.8	3.8	3.1	3.1	3.1
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	4.2	21.6	24.5	32.1	0.6	1.2	1.2	1.3
Parents	5.2	27.2	34.2	35.9	1.7	2.5	2.7	2.6
11/73 to 10/74								
Nonparents	5.0	29.9	35.1	30.6	1.1	2.0	2.0	1.9
Parents	7.3	39.2	44.8	36.1	1.5	2.3	2.3	2.2
6/72 to 10/73								
Nonparents	9.6	34.8	35.5	28.7	1.5	2.0	2.0	1.9
Parents	13.1	40.3	39.9	35.0	1.3	1.5	1.5	1.4
Before 6/72								
Nonparents	15.8	27.2	26.1	24.7	5.1	5.1	5.1	4.8
Parents	29.7	34.0	33.7	29.8	3.5	2.7	2.7	2.6

It is interesting to observe that, although the questions about career aspirations on the 1974 and 1976 surveys were identical, there was a sharp drop of about five percentage points in the homemaker expectation percentages between 1974 and 1976 for each of the categories of married women listed in Tables 7.11 and 7.14, except for those who married after October 1974. This may have signaled a shift in young women's thinking about homemaking as a career, but we conjecture that it reflects uncertainties about their husbands' jobs during the recession. Unemployment rates for men increased sharply during 1975 and remained high through 1977. Although unemployment rates for women also rose (but not as much), the labor force participation rate among women continued to rise from 1974 to 1977.[2]

[2]U.S. Department of Labor (1979), pp. 34, 176.

Table 7.13

INTERGROUP DIFFERENCES IN ADJUSTED PERCENTAGES OF WOMEN WHO PLAN TO BE HOMEMAKERS AT AGE 30

Parenthood Status as of October 1976	Differences from Single nonparents				Standard Errors			
	1972	1973	1974	1976	1972	1973	1974	1976
SINGLE FEMALES								
Nonparents	----	----	----	----	----	----	----	----
Parents	2.8	7.1	4.6	8.0	1.8	2.3	2.1	2.1
After 10/74	0.0	5.5	4.2	11.2	1.8	3.4	3.3	3.4
11/73-10/74	2.1	8.1	5.8	6.9	2.7	3.7	3.3	3.2
Before 10/73	8.1	7.7	3.5	4.4	4.8	4.0	3.5	3.5
Prob. 6/72-10/73	4.3	5.8	-1.3	2.1	6.3	5.1	4.0	4.3
Prob. before 6/72	10.7	9.1	9.5	6.8	6.9	6.3	6.1	5.7
EVER MARRIED FEMALES								
Nonparents	3.7	13.5	16.8	19.9	0.6	1.1	1.1	1.0
Parents	10.6	24.0	26.6	23.7	1.0	1.2	1.2	1.2
After 10/74	5.8	26.0	30.5	27.1	1.1	1.7	1.7	1.6
11/73-10/74	8.4	25.3	24.7	22.0	1.7	2.1	2.1	2.1
Before 10/73	19.0	19.6	21.6	19.2	2.1	1.9	2.0	1.9
Prob. 6/72-10/73	18.3	22.7	25.6	22.0	2.5	2.3	2.3	2.3
Prob. before 6/72	20.4	12.6	12.6	12.9	3.8	3.2	3.2	3.1
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	1.9	8.2	11.8	21.2	0.7	1.3	1.3	1.4
Parents	2.9	13.8	21.5	25.0	1.7	2.6	2.7	2.7
11/73 to 10/74								
Nonparents	2.7	16.4	22.4	19.7	1.2	2.0	2.1	2.0
Parents	5.0	25.7	32.2	25.2	1.5	2.4	2.4	2.3
6/72 to 10/73								
Nonparents	7.3	21.4	22.8	17.8	1.5	2.1	2.1	1.9
Parents	10.8	26.9	27.2	24.1	1.3	1.6	1.6	1.5
Before 6/72								
Nonparents	13.5	13.7	13.4	13.8	5.1	5.1	5.1	4.8
Parents	27.4	20.6	21.1	18.9	3.5	2.8	2.8	2.7

CAREER PROGRESS IN 1976

To provide a measure of career progress in October 1976 analogous to the measures of career aspirations considered previously, we created a variable CAREER76 by first classifying the census code for each NLS participant's occupation into one of the 16 categories listed in Table 7.1. Then we assigned the same measure to that category as was used in creating the career aspirations measures. (For the classification of census codes, see the coding specification of CAREER76 in App. A.)

The mean values of CAREER76 by marital/parenthood category are given in Table 7.15. Understandably, the overall means of 31.8 for women and 26.1 for men are far below the corresponding means for the career aspiration measures in 1976 (46.8 for women and 44.3 for men). To facilitate interpreting the mean values of the occupational measures, it may help to keep in mind that

Table 7.14

Results of the Analysis of Women's Plans To Be Homemakers at Age 30 for NLS Respondents Who Were Married as of October 1973

Parenthood Status as of October 1976	Percentage				Sample Sizes			
	1972	1973	1974	1976	1972	1973	1974	1976
Nonparents	10.1	36.7	37.4	31.1	466	694	701	756
Parents	16.0	42.4	42.1	37.4	911	1577	1592	1622
After 10/74	9.9	47.2	47.6	41.7	273	439	458	475
11/73-10/74	11.7	45.0	41.7	37.4	247	480	446	446
Before 10/73	22.5	36.5	37.2	33.2	347	644	618	615
Prob. 6/72-10/73	21.7	39.8	41.3	36.4	235	455	433	434
Prob. before 6/72	24.1	28.6	27.6	25.4	112	189	185	181

Parenthood Status as of October 1976	Adjusted Percentage				Standard Errors			
	1972	1973	1974	1976	1972	1973	1974	1976
Nonparents	10.1	36.7	37.4	31.1	1.4	1.8	1.8	1.7
Parents	18.0	41.6	43.5	37.4	1.4	1.6	1.6	1.5
After 10/74	12.5	47.5	48.4	42.4	1.9	2.4	2.4	2.3
11/73-10/74	13.3	42.2	41.0	35.7	2.2	2.5	2.6	2.5
Before 10/73	24.4	36.7	40.5	34.2	2.5	2.4	2.5	2.3
Prob. 6/72-10/73	23.6	39.8	43.9	36.9	2.9	2.6	2.7	2.6
Prob. before 6/72	26.3	29.7	32.7	28.1	4.4	4.0	4.0	3.8

Parenthood Status as of October 1976	Differences from Married Nonparents				Standard Errors			
	1972	1973	1974	1976	1972	1973	1974	1976
Nonparents	----	----	----	----	----	----	----	----
Parents	7.9	4.9	6.1	6.4	2.0	2.4	2.4	2.3
After 10/74	2.4	10.8	11.0	11.4	2.3	3.1	3.0	2.9
11/73-10/74	3.2	5.4	3.7	4.6	2.6	3.1	3.2	3.0
Before 10/73	14.3	0.0	3.1	3.2	2.9	3.0	3.1	2.9
Prob. 6/72-10/73	13.5	3.0	6.6	5.8	3.2	3.2	3.2	3.1
Prob. before 6/72	16.2	-7.0	-4.7	-3.0	4.6	4.4	4.4	4.2

the value of CAREER76 for a homemaker is 36, the value for service workers is 25, and the value for a schoolteacher is 63. Thus, the overall averages of the career attainment measures are far removed from the professional career ratings that almost half of the NLS participants aspired to when they were seniors.

Table 7.15 demonstrates that the differences between the means for the single nonparents in October 1976 and the means for the married nonparents are not very large, indicating only a small effect due to marriage. There are larger differences between the parents and nonparents, especially among the women, indicating that early parenthood impedes the career development of young mothers.

Table 7.15

Mean Values of the 1976 Occupation Index by Marital and Parenthood Status

Parenthood Status as of October 1976	Sample Mean	Sample Size
	SINGLE FEMALES	
Nonparents	36.6	3256
Parents	30.9	237
After 10/74	29.9	92
11/73-10/74	32.5	81
Before 10/73	30.4	64
Prob. 6/72-10/73	29.2	40
Prob. before 6/72	32.4	24
	EVER MARRIED FEMALES	
Nonparents	35.6	2153
Parents	30.6	1127
After 10/74	31.1	421
11/73-10/74	30.5	297
Before 10/73	30.2	364
Prob. 6/72-10/73	30.5	247
Prob. before 6/72	29.4	117
TIMING OF FIRST MARRIAGE:		
After 10/74		
Nonparents	37.2	1046
Parents	30.8	144
11/73 to 10/74		
Nonparents	35.0	490
Parents	30.6	220
6/72 to 10/73		
Nonparents	33.5	536
Parents	30.7	566
Before 6/72		
Nonparents	32.7	73
Parents	29.8	193
	SINGLE MALES	
Nonparents	31.1	4385
Parents	25.0	182
After 10/74	24.2	103
11/73-10/74	25.8	64
Before 10/73	26.5	15
	EVER MARRIED MALES	
Nonparents	29.2	1842
Parents	26.4	1502
After 10/74	26.7	802
11/73-10/74	25.7	336
Before 10/73	26.3	284
Prob. 6/72-10/73	26.8	222
Prob. before 6/72	24.6	62
TIMING OF FIRST MARRIAGE:		
After 10/74		
Nonparents	29.8	1169
Parents	27.4	366
11/73 to 10/74		
Nonparents	29.1	388
Parents	26.5	406
6/72 to 10/73		
Nonparents	26.8	265
Parents	26.1	608
Before 6/72		
Nonparents	26.9	10
Parents	24.2	115

Since many of the single nonparents (and some of the other NLS participants as well) were still students in October 1976, the means for the CAREER76 measures may be distorted by the prevalence of part-time and temporary jobs. For this reason, a more detailed analysis of this table will not be presented. (An analysis of wages will be deferred until Sec. IX.) Instead we shall consider a measure of *satisfaction* with career progress that may serve as a better gauge of the extent to which early family formation interferes with career development.

SATISFACTION WITH CAREER PROGRESS IN 1976

On the third follow-up survey, the NLS participants were asked, "How satisfied are you with the progress you have made towards doing the kind of work you expect to be doing when you are 30 years old?" Their responses were scored from 1 to 4 as follows:

Very dissatisfied	1
Dissatisfied	2
Satisfied	3
Very satisfied	4

Tables 7.16 through 7.20 provide the summary statistics for our analysis of these measures. First, we note that the group means are all quite close to 3.0, the score corresponding to "Satisfied." Secondly, we observe that, despite the higher occupational indices of single nonparents reported in Table 7.15, the single nonparents are not as satisfied with their career progress as the ever married nonparents.

From the intergroup differences reported in Table 7.18, we see that the female single parents are significantly less satisfied with their career progress than the single nonparents, whereas the ever married women are significantly more satisfied. Also, there is a definite relationship between the timing of marriage and job satisfaction. The earlier the marriage, the less satisfied the women are with their career progress.

The married males appear to be more satisfied with their career progress on average than the single nonparents. Among the ever married males, the parents are slightly less satisfied than the nonparents, but the differences are small.

From Table 7.19, we see that, among the women who married before October 1973, the mothers are less satisfied than the nonmothers, and the early mothers are less satisfied than those who became mothers after October 1974. Among the men who married early, the fathers are less satisfied with their career progress than the nonfathers, but there is no clear relationship between the degree of satisfaction and timing of parenthood.

The regression results reported in Table 7.20 confirm the finding that being married is positively associated with career satisfaction while parenthood apparently has a negative effect. It is interesting that blacks are much less

satisfied with their career progress than whites, even after allowing for differences on a number of background factors. This may result from the fact that blacks have inordinately high educational and career aspirations compared with other minorities and whites with similar academic and socioeconomic backgrounds.

Table 7.16

Mean Values of the 1976 Career Progress Satisfaction Index by Marital and Parenthood Status

Parenthood Status as of October 1976	Sample Mean	Sample Size
	SINGLE FEMALES	
Nonparents	3.03	4212
Parents	2.73	401
After 10/74	2.75	157
11/73-10/74	2.78	139
Before 10/73	2.65	105
Prob. 6/72-10/73	2.65	63
Prob. before 6/72	2.64	42
	EVER MARRIED FEMALES	
Nonparents	3.16	2733
Parents	3.03	2474
After 10/74	3.09	1076
11/73-10/74	2.99	600
Before 10/73	2.96	696
Prob. 6/72-10/73	2.99	492
Prob. before 6/72	2.89	204
TIMING OF FIRST MARRIAGE:		
After 10/74		
Nonparents	3.19	1371
Parents	3.03	342
11/73 to 10/74		
Nonparents	3.19	600
Parents	3.05	506
6/72 to 10/73		
Nonparents	3.12	663
Parents	3.03	1278
Before 6/72		
Nonparents	3.01	91
Parents	2.99	342
	SINGLE MALES	
Nonparents	2.99	5563
Parents	2.85	230
After 10/74	2.82	129
11/73-10/74	2.90	77
Before 10/73	2.83	24
	EVER MARRIED MALES	
Nonparents	3.16	1977
Parents	3.05	1545
After 10/74	3.09	826
11/73-10/74	2.99	341
Before 10/73	3.03	294
Prob. 6/72-10/73	3.06	225
Prob. before 6/72	2.94	69
TIMING OF FIRST MARRIAGE:		
After 10/74		
Nonparents	3.16	1267
Parents	3.05	376
11/73 to 10/74		
Nonparents	3.17	418
Parents	3.06	417
6/72 to 10/73		
Nonparents	3.17	278
Parents	3.04	624
Before 6/72		
Nonparents	3.11	9
Parents	3.05	124

Table 7.17

Adjusted Mean Values of the 1976 Career Progress Satisfaction Index by Marital and Parenthood Status

Parenthood Status as of October 1976	Adjusted Mean	Standard Error
	SINGLE FEMALES	
Nonparents	3.03	0.01
Parents	2.92	0.05
After 10/74	2.90	0.07
11/73-10/74	2.97	0.07
Before 10/73	2.87	0.08
Prob. 6/72-10/73	2.86	0.10
Prob. before 6/72	2.89	0.13
	EVER MARRIED FEMALES	
Nonparents	3.16	0.02
Parents	3.08	0.02
After 10/74	3.12	0.03
11/73-10/74	3.06	0.03
Before 10/73	3.05	0.03
Prob. 6/72-10/73	3.07	0.04
Prob. before 6/72	3.00	0.06
TIMING OF FIRST MARRIAGE:		
After 10/74		
Nonparents	3.17	0.02
Parents	3.09	0.04
11/73 to 10/74		
Nonparents	3.18	0.03
Parents	3.11	0.04
6/72 to 10/73		
Nonparents	3.12	0.03
Parents	3.08	0.03
Before 6/72		
Nonparents	3.00	0.09
Parents	3.05	0.05
	SINGLE MALES	
Nonparents	2.99	0.01
Parents	2.99	0.06
After 10/74	2.96	0.07
11/73-10/74	3.03	0.09
Before 10/73	3.00	0.16
	EVER MARRIED MALES	
Nonparents	3.16	0.02
Parents	3.10	0.02
After 10/74	3.11	0.03
11/73-10/74	3.05	0.04
Before 10/73	3.10	0.05
Prob. 6/72-10/73	3.13	0.05
Prob. before 6/72	3.01	0.10
TIMING OF FIRST MARRIAGE:		
After 10/74		
Nonparents	3.15	0.02
Parents	3.10	0.04
11/73 to 10/74		
Nonparents	3.16	0.04
Parents	3.11	0.04
6/72 to 10/73		
Nonparents	3.18	0.05
Parents	3.08	0.03
Before 6/72		
Nonparents	3.14	0.27
Parents	3.09	0.07

Table 7.18

Intergroup Differences in Adjusted Means for the 1976 Career Progress Satisfaction Index

Parenthood Status as of October 1976	Differences from Single Nonparents	Standard Error
	SINGLE FEMALES	
Nonparents	----	----
Parents	-0.11	0.05
After 10/74	-0.13	0.07
11/73-10/74	-0.06	0.07
Before 10/73	-0.15	0.08
Prob. 6/72-10/73	-0.17	0.11
Prob. before 6/72	-0.14	0.13
	EVER MARRIED FEMALES	
Nonparents	0.13	0.02
Parents	0.05	0.02
After 10/74	0.09	0.03
11/73-10/74	0.03	0.04
Before 10/73	0.02	0.04
Prob. 6/72-10/73	0.04	0.04
Prob. before 6/72	-0.03	0.06
TIMING OF FIRST MARRIAGE:		
After 10/74		
Nonparents	0.14	0.03
Parents	0.07	0.05
11/73 to 10/74		
Nonparents	0.15	0.04
Parents	0.08	0.04
6/72 to 10/73		
Nonparents	0.09	0.04
Parents	0.05	0.03
Before 6/72		
Nonparents	-0.02	0.09
Parents	0.02	0.05
	SINGLE MALES	
Nonparents	----	----
Parents	0.00	0.06
After 10/74	-0.03	0.07
11/73-10/74	0.04	0.09
Before 10/73	0.01	0.16
	EVER MARRIED MALES	
Nonparents	0.17	0.02
Parents	0.11	0.02
After 10/74	0.13	0.03
11/73-10/74	0.06	0.05
Before 10/73	0.11	0.05
Prob. 6/72-10/73	0.14	0.06
Prob. before 6/72	0.02	0.10
TIMING OF FIRST MARRIAGE:		
After 10/74		
Nonparents	0.16	0.03
Parents	0.11	0.04
11/73 to 10/74		
Nonparents	0.17	0.04
Parents	0.12	0.04
6/72 to 10/73		
Nonparents	0.19	0.05
Parents	0.09	0.03
Before 6/72		
Nonparents	0.15	0.27
Parents	0.11	0.07

Table 7.19

Results of the Analysis of the 1976 Career Progress Satisfaction Index for NLS Respondents Who Were Married as of October 1973

Parenthood Status as of October 1976	Sample Mean	Sample Size
	FEMALES	
Nonparents	3.10	754
Parents	3.02	1620
After 10/74	3.10	472
11/73-10/74	3.02	442
Before 10/73	2.98	620
Prob. 6/72-10/73	3.01	440
Prob. before 6/72	2.91	180
	MALES	
Nonparents	3.16	287
Parents	3.04	748
After 10/74	3.10	196
11/73-10/74	3.02	212
Before 10/73	3.04	275
Prob. 6/72-10/73	3.06	209
Prob. before 6/72	2.97	66

Parenthood Status as of October 1976	Adjusted Mean	Standard Error
	FEMALES	
Nonparents	3.10	0.03
Parents	3.05	0.02
After 10/74	3.11	0.04
11/73-10/74	3.05	0.04
Before 10/73	3.03	0.04
Prob. 6/72-10/73	3.05	0.04
Prob. before 6/72	2.97	0.07
	MALES	
Nonparents	3.16	0.04
Parents	3.05	0.04
After 10/74	3.08	0.06
11/73-10/74	3.03	0.06
Before 10/73	3.06	0.06
Prob. 6/72-10/73	3.09	0.06
Prob. before 6/72	3.00	0.10

Parenthood Status as of October 1976	Differences from Married Nonparents	Standard Error
	FEMALES	
Nonparents	----	----
Parents	-0.05	0.04
After 10/74	0.00	0.05
11/73-10/74	-0.05	0.05
Before 10/73	-0.08	0.05
Prob. 6/72-10/73	-0.05	0.05
Prob. before 6/72	-0.14	0.07
	MALES	
Nonparents	----	----
Parents	-0.11	0.06
After 10/74	-0.08	0.07
11/73-10/74	-0.14	0.07
Before 10/73	-0.10	0.07
Prob. 6/72-10/73	-0.08	0.08
Prob. before 6/72	-0.17	0.11

Table 7.20

Regression Results for Satisfaction with Career Progress as of 1976

Variable	Females b	Females t	Males b	Males t
Constant	3.03	34.1	3.12	36.4
Race/Ethnicity				
Black	-0.293	-10.6	-0.248	-8.3
Hispanic	-0.112	-2.6	-0.134	-3.1
Indian	0.041	0.5	-0.049	-0.6
Oriental	-0.071	-0.9	-0.139	-1.9
Other minority	-0.002	-0.0	-0.040	-0.8
Region				
Northeast	-0.021	-0.9	-0.013	-0.5
South	0.013	0.6	0.052	2.4
West	0.008	0.3	0.019	0.7
High school measures				
Ability	-0.0009	-2.4	-0.0018	-5.0
Percentile rank in class	0.0021	5.3	0.0028	7.2
Academic program	0.037	1.7	0.040	1.8
Vocational-technical program	0.048	2.3	0.037	1.6
Family background				
Father's education	0.0050	1.2	0.0080	1.9
Mother's education	-0.0032	-0.6	-0.0048	-0.9
Father's occupation (SEI)	0.0000	0.0	-0.0004	-0.9
Mother's professional status	0.001	0.0	0.009	0.3
Postsecondary track (1972)				
4-year student	0.059	2.3	0.123	4.8
2-year student	-0.023	-0.8	0.025	0.9
Vocational-technical student	0.065	2.1	0.074	1.9
Military	0.014	0.1	-0.067	-1.7
Homemaker	-0.076	-1.9		
Unemployed	0.008	0.3	-0.126	-3.4
Marital status (1976)				
Months since first marriage	0.0001	0.1	0.0009	0.9
Married	0.169	6.0	0.179	6.1
Divorced, widowed, or separated	-0.045	-1.0	-0.039	-0.7
Expecting to be married	0.139	4.7	0.117	4.1
Parenthood				
Parent by October 1973	-0.085	-2.1	-0.043	-0.7
Parent Nov. 1973 to Oct. 1974	-0.085	-2.4	-0.068	-1.4
Parent Nov. 1974 to Oct. 1976	-0.053	-1.9	-0.037	-1.2
Expecting parenthood, 1976	0.031	0.9	-0.012	-0.3
Two or more children, 1976	0.003	0.1	-0.006	-0.1
R^2	0.039		0.039	
S	0.800		0.789	
F	12.8		12.6	
N	9650		9366	

VIII. ECONOMIC CHARACTERISTICS

This section examines the relationships between early family formation and economic characteristics for the NLS participants during the four-year period from 1972 to 1976. In considering the consequences of early parenthood for the Class of 1972, we entertain the view that childbearing affects the economic well-being of young couples not only by disrupting the wives' employment patterns but also by pressuring the husbands to produce additional income (Cramer, 1979). This view was partly substantiated in Sec. V, where it was shown that, among the married NLS participants, the mothers had much lower labor force participation rates than the nonmothers in October 1976, and the fathers were more likely to be employed than the nonfathers. This section complements those findings by examining how wages, hours worked, wage rates, and family income are related to early family formation.

WAGES

Table 8.1 reports the average weekly wages of the NLS participants in 1974 and 1976 by marital/parenthood categories. Table 8.2 provides similar comparisons for the NLS participants who married before October 1973. The data on wages reported here are gross earnings (before deductions) for those NLS members who held any kind of job during the first week of October in 1974 and 1976. The data include wages from both full-time and part-time jobs, apprenticeships, on-the-job training, and military service.[1]

Tables 8.1 and 8.2 reveal large differences in weekly wages in 1976 between the mothers and nonmothers, as well as between the single men and the married men. In interpreting these differences, one must keep in mind that the averages reported here exclude those NLS participants who were not wage-earners. Since more than half of the mothers were not employed in October 1976 (see Table 5.8), Tables 8.1 and 8.2 understate the differences in earnings between the mothers and nonmothers. The lower weekly wages for the single nonparents in 1974 are partly accounted for by the fact that a much higher percentage of the single nonparents were enrolled in college (see Table 5.6), and many of them held low-paying part-time jobs.

The disparity in hours worked per week in 1974 is apparent from Tables 8.3 and 8.4. The differences were not as great in 1976, but the single males continued to work about three hours per week less than the ever married males.

---

[1]For individuals who held two jobs, the figures on wages and hours worked are the sum of the figures for the two jobs. See App. A for exact specifications of the economic variables treated in this section.

Table 8.1

Mean Values of Pay Per Week in Dollars for Employed NLS Participants by Marital and Parenthood Status

Parenthood Status as of October 1976	Sample Means		Sample Sizes	
	1974	1976	1974	1976
SINGLE FEMALES				
Nonparents	89.54	139.50	2194	2495
Parents	103.99	124.76	166	163
After 10/74	100.68	120.49	66	61
11/73-10/74	95.00	130.79	52	58
Before 10/73	118.29	122.73	48	44
Prob. 6/72-10/73	117.87	121.59	31	27
Prob. before 6/72	119.06	124.53	17	17
EVER MARRIED FEMALES				
Nonparents	101.37	140.25	1694	1637
Parents	100.89	119.53	999	818
After 10/74	102.11	122.22	562	307
11/73-10/74	99.92	119.36	155	209
Before 10/73	98.39	117.03	261	271
Prob. 6/72-10/73	97.47	115.62	183	191
Prob. before 6/72	100.54	120.36	78	81
TIMING OF FIRST MARRIAGE:				
After 10/74				
Nonparents	97.56	142.80	849	825
Parents	102.47	129.54	187	109
11/73 to 10/74				
Nonparents	107.25	146.49	390	347
Parents	99.97	119.03	211	157
6/72 to 10/73				
Nonparents	103.22	127.79	393	412
Parents	103.03	116.34	472	410
Before 6/72				
Nonparents	104.92	157.43	59	47
Parents	93.14	120.47	126	140
SINGLE MALES				
Nonparents	124.81	175.16	2922	3477
Parents	140.07	187.39	125	151
After 10/74	128.07	180.93	61	84
11/73-10/74	152.70	196.87	50	54
Before 10/73	147.29	189.77	14	13
EVER MARRIED MALES				
Nonparents	149.29	211.82	1329	1468
Parents	167.80	209.61	1131	1199
After 10/74	162.00	206.83	597	645
11/73-10/74	177.45	210.62	271	262
Before 10/73	170.11	209.93	226	227
Prob. 6/72-10/73	166.06	208.27	178	182
Prob. before 6/72	185.12	216.64	48	45
TIMING OF FIRST MARRIAGE:				
After 10/74				
Nonparents	141.59	207.89	808	933
Parents	156.68	197.79	249	286
11/73 to 10/74				
Nonparents	157.44	222.70	308	315
Parents	164.03	207.12	312	331
6/72 to 10/73				
Nonparents	169.09	215.39	202	204
Parents	171.44	216.17	489	487
Before 6/72				
Nonparents	139.12	172.22	8	9
Parents	195.92	221.00	79	88

Table 8.2

MEAN VALUES OF PAY PER WEEK IN DOLLARS FOR EMPLOYED NLS RESPONDENTS WHO WERE MARRIED AS OF OCTOBER 1973

Parenthood Status as of October 1976	Sample Means		Sample Sizes	
	1974	1976	1974	1976
	FEMALES			
Nonparents	103.44	130.82	452	459
Parents	100.95	117.39	598	550
After 10/74	103.80	118.65	235	139
11/73-10/74	103.13	120.72	109	146
Before 10/73	96.35	115.22	235	240
Prob. 6/72-10/73	97.17	113.80	165	166
Prob. before 6/72	94.41	118.41	70	74
	MALES			
Nonparents	167.95	213.57	210	213
Parents	174.85	216.91	568	575
After 10/74	170.66	220.56	155	152
11/73-10/74	181.78	213.62	168	166
Before 10/73	172.25	211.85	210	213
Prob. 6/72-10/73	167.68	210.38	165	169
Prob. before 6/72	189.02	217.48	45	44

Interestingly, the employed mothers averaged almost as many hours on the job as the nonmothers.

WAGE RATES

Tables 8.5 through 8.8 provide summary statistics for an analysis of hourly wage rates across marital/parenthood categories. Considering the women first, we note that the working mothers had substantially lower hourly rates of pay than the nonmothers in 1976. Among the ever married women, the mothers averaged only $3.29 per hour in 1976, as compared with $3.69 for the nonmothers. There are a number of possible explanations for this disparity: (1) The employed mothers had lower educational attainment than the nonmothers in 1976 (see Table 6.2); (2) the working mothers had less experience in the labor market because of breaks in their employment patterns during childbearing (see Table 5.8); (3) because of constraints imposed by child care responsibilities, the mothers chose (or were restricted to) lower status occupations (see Table 7.15); (4) mothers whose children are still babies may be penalized in the labor market because employers are uncertain about how their roles as mothers will interfere with their work; (5) the mothers differ from the nonmothers on numerous background measures that may affect their job choices, employability, and wages.

Among the males, the married men had substantially higher rates of pay than the single men in 1976, but the differences in wage rates between fathers

Table 8.3

Mean Values of Hours Worked Per Week for Employed NLS Participants by Marital and Parenthood Status

Parenthood Status as of October 1976	Sample Means 1974	Sample Means 1976	Sample Sizes 1974	Sample Sizes 1976
	SINGLE FEMALES			
Nonparents	32.3	37.0	2194	2495
Parents	37.3	37.6	166	163
After 10/74	36.6	37.1	66	61
11/73-10/74	36.4	38.0	52	58
Before 10/73	39.2	37.6	48	44
Prob. 6/72-10/73	39.0	37.9	31	27
Prob. before 6/72	39.5	37.1	17	17
	EVER MARRIED FEMALES			
Nonparents	36.1	38.5	1694	1637
Parents	37.5	36.7	999	818
After 10/74	38.0	36.5	562	307
11/73-10/74	35.9	37.0	155	209
Before 10/73	37.5	36.5	261	272
Prob. 6/72-10/73	37.4	36.7	183	191
Prob. before 6/72	37.7	36.0	78	81
TIMING OF FIRST MARRIAGE:				
After 10/74				
Nonparents	34.2	38.1	849	825
Parents	38.5	37.8	187	109
11/73 to 10/74				
Nonparents	38.0	39.6	390	347
Parents	37.6	37.1	211	157
6/72 to 10/73				
Nonparents	38.0	37.9	393	412
Parents	37.3	36.2	472	410
Before 6/72				
Nonparents	39.3	40.3	59	47
Parents	36.9	36.9	126	140
	SINGLE MALES			
Nonparents	37.6	41.1	2922	3477
Parents	41.8	42.3	125	151
After 10/74	40.9	42.9	61	84
11/73-10/74	43.7	42.1	50	54
Before 10/73	38.6	39.8	14	13
	EVER MARRIED MALES			
Nonparents	41.1	44.2	1329	1468
Parents	45.3	45.5	1131	1199
After 10/74	44.9	45.1	597	645
11/73-10/74	45.6	46.0	271	262
Before 10/73	46.0	45.5	226	227
Prob. 6/72-10/73	45.5	44.6	178	182
Prob. before 6/72	47.9	49.0	48	45
TIMING OF FIRST MARRIAGE:				
After 10/74				
Nonparents	39.4	43.9	808	933
Parents	44.8	43.6	249	286
11/73 to 10/74				
Nonparents	43.1	45.0	306	315
Parents	45.2	45.0	312	331
6/72 to 10/73				
Nonparents	44.7	44.9	202	204
Parents	45.3	46.6	489	487
Before 6/72				
Nonparents	41.9	37.7	8	9
Parents	48.4	47.0	79	88

Table 8.4

MEAN VALUES OF HOURS WORKED PER WEEK FOR EMPLOYED NLS RESPONDENTS WHO WERE MARRIED AS OF OCTOBER 1973

Parenthood Status as of October 1976	Sample Means		Sample Sizes	
	1974	1976	1974	1976
	FEMALES			
Nonparents	38.1	38.1	452	459
Parents	37.2	36.4	598	550
After 10/74	37.6	35.3	235	139
11/73-10/74	36.6	37.2	109	146
Before 10/73	37.1	36.4	235	240
Prob. 6/72-10/73	37.3	36.6	165	166
Prob. before 6/72	36.4	36.1	70	74
	MALES			
Nonparents	44.6	44.5	210	213
Parents	45.7	46.6	568	575
After 10/74	45.5	47.2	155	152
11/73-10/74	44.8	47.2	168	166
Before 10/73	46.3	45.9	210	213
Prob. 6/72-10/73	45.7	45.0	165	169
Prob. before 6/72	48.2	49.2	45	44

and nonfathers were small. As is the case with women, it is hazardous to infer the consequences of early family formation from comparisons of wage rates across marital/parenthood categories, because wage rates depend on numerous factors that are difficult to sort out: educational attainment, occupation, experience, local labor market conditions, and personal characteristics. Moreover, some employers may pay married men more than single men with comparable employee characteristics, perhaps because they feel that "family men" are more dependable, more highly motivated, less apt to quit their jobs, or simply more needy.

In considering the many ways in which early family formation might affect the earnings of males, we entertain the view that young fathers, under pressure to produce income at an early age, may have to forgo college attendance and low-paying, on-the-job training programs to increase current income. According to this view, the young fathers may have higher incomes than the others during their first few years on the job, but the nonfathers who invest more time in education and training will exhibit faster earnings growth and overtake the fathers (Mincer, 1974). This study provides considerable evidence to support that view. It was shown earlier that, on average, the young fathers had lower educational attainment than the nonfathers (Table 6.2), and held jobs with lower occupational status (Table 7.15). Compared with the nonfathers, a much higher proportion of the fathers were employed each year between 1972 and 1976 (Table 5.8), indicating that the fathers accumulated more experience and

Table 8.5

Mean Values of Hourly Wage Rates for Employed NLS Participants by Marital and Parenthood Status

Parenthood Status as of October 1976	Sample Means		Sample Sizes	
	1974	1976	1974	1976
SINGLE FEMALES				
Nonparents	2.74	3.79	2194	2495
Parents	2.81	3.24	166	163
After 10/74	2.88	3.18	66	61
11/73-10/74	2.55	3.36	52	58
Before 10/73	2.99	3.16	48	44
Prob. 6/72-10/73	3.01	3.12	31	27
Prob. before 6/72	2.97	3.22	17	17
EVER MARRIED FEMALES				
Nonparents	2.82	3.69	1694	1637
Parents	2.75	3.29	999	818
After 10/74	2.72	3.38	562	307
11/73-10/74	2.94	3.29	155	209
Before 10/73	2.68	3.20	261	272
Prob. 6/72-10/73	2.68	3.15	183	191
Prob. before 6/72	2.67	3.33	78	81
TIMING OF FIRST MARRIAGE:				
After 10/74				
Nonparents	2.87	3.77	849	825
Parents	2.73	3.52	187	109
11/73 to 10/74				
Nonparents	2.82	3.77	390	347
Parents	2.74	3.29	211	157
6/72 to 10/73				
Nonparents	2.74	3.42	393	412
Parents	2.83	3.24	472	410
Before 6/72				
Nonparents	2.68	3.97	59	47
Parents	2.52	3.23	126	140
SINGLE MALES				
Nonparents	3.33	4.31	2922	3477
Parents	3.42	4.47	125	151
After 10/74	3.28	4.26	61	84
11/73-10/74	3.46	4.75	50	54
Before 10/73	3.86	4.61	14	13
EVER MARRIED MALES				
Nonparents	3.68	4.82	1329	1468
Parents	3.80	4.70	1131	1199
After 10/74	3.70	4.67	597	645
11/73-10/74	3.98	4.73	271	262
Before 10/73	3.85	4.70	226	227
Prob. 6/72-10/73	3.83	4.73	178	182
Prob. before 6/72	3.92	4.59	48	45
TIMING OF FIRST MARRIAGE:				
After 10/74				
Nonparents	3.63	4.77	808	933
Parents	3.59	4.59	249	286
11/73 to 10/74				
Nonparents	3.75	4.93	308	315
Parents	3.71	4.68	312	331
6/72 to 10/73				
Nonparents	3.82	4.87	202	204
Parents	3.91	4.78	489	487
Before 6/72				
Nonparents	3.29	5.06	8	9
Parents	4.19	4.72	79	88

Table 8.6

Adjusted Mean Values of Hourly Wage Rates for Employed NLS Participants by Marital and Parenthood Status

Parenthood Status as of October 1976	Adjusted Means		Standard Errors	
	1974	1976	1974	1976
SINGLE FEMALES				
Nonparents	2.74	3.79	0.04	0.04
Parents	2.71	3.39	0.17	0.17
After 10/74	2.77	3.32	0.25	0.27
11/73-10/74	2.46	3.49	0.28	0.28
Before 10/73	2.89	3.35	0.29	0.32
Prob. 6/72-10/73	2.88	3.33	0.36	0.40
Prob. before 6/72	2.87	3.37	0.48	0.50
EVER MARRIED FEMALES				
Nonparents	2.81	3.74	0.05	0.06
Parents	2.71	3.43	0.07	0.08
After 10/74	2.70	3.49	0.09	0.12
11/73-10/74	2.87	3.43	0.16	0.15
Before 10/73	2.64	3.37	0.13	0.13
Prob. 6/72-10/73	2.64	3.32	0.15	0.15
Prob. before 6/72	2.63	3.49	0.22	0.23
TIMING OF FIRST MARRIAGE:				
After 10/74				
Nonparents	2.86	3.79	0.07	0.07
Parents	2.67	3.65	0.15	0.20
11/73 to 10/74				
Nonparents	2.81	3.82	0.10	0.11
Parents	2.68	3.42	0.14	0.17
6/72 to 10/73				
Nonparents	2.73	3.52	0.10	0.11
Parents	2.79	3.37	0.10	0.11
Before 6/72				
Nonparents	2.69	4.09	0.26	0.30
Parents	2.53	3.40	0.18	0.18
SINGLE MALES				
Nonparents	3.33	4.31	0.03	0.04
Parents	3.31	4.70	0.18	0.21
After 10/74	3.16	4.48	0.25	0.28
11/73-10/74	3.38	5.02	0.27	0.34
Before 10/73	3.73	4.88	0.51	0.69
EVER MARRIED MALES				
Nonparents	3.65	4.79	0.05	0.07
Parents	3.68	4.69	0.06	0.08
After 10/74	3.60	4.64	0.08	0.10
11/73-10/74	3.83	4.72	0.12	0.16
Before 10/73	3.70	4.71	0.13	0.17
Prob. 6/72-10/73	3.69	4.74	0.14	0.19
Prob. before 6/72	3.74	4.61	0.27	0.37
TIMING OF FIRST MARRIAGE:				
After 10/74				
Nonparents	3.60	4.75	0.07	0.08
Parents	3.47	4.59	0.12	0.15
11/73 to 10/74				
Nonparents	3.72	4.88	0.11	0.14
Parents	3.59	4.68	0.11	0.14
6/72 to 10/73				
Nonparents	3.75	4.83	0.14	0.18
Parents	3.79	4.76	0.09	0.12
Before 6/72				
Nonparents	3.22	4.97	0.66	0.82
Parents	4.03	4.73	0.22	0.27

Table 8.7

Intergroup Differences in Adjusted Means for Hourly Wage Rates

Parenthood Status as of October 1976	Differences from Single Nonparents		Standard Errors	
	1974	1976	1974	1976
	SINGLE FEMALES			
Nonparents	----	----	----	----
Parents	-0.03	-0.40	0.17	0.18
After 10/74	0.03	-0.46	0.25	0.27
11/73-10/74	-0.28	-0.30	0.28	0.28
Before 10/73	0.15	-0.44	0.30	0.32
Prob. 6/72-10/73	0.14	-0.46	0.36	0.40
Prob. before 6/72	0.13	-0.41	0.48	0.50
	EVER MARRIED FEMALES			
Nonparents	0.07	-0.05	0.07	0.07
Parents	-0.03	-0.36	0.08	0.09
After 10/74	-0.05	-0.29	0.10	0.13
11/73-10/74	0.13	-0.35	0.17	0.15
Before 10/73	-0.10	-0.41	0.13	0.14
Prob. 6/72-10/73	-0.10	-0.46	0.15	0.16
Prob. before 6/72	-0.11	-0.30	0.23	0.23
TIMING OF FIRST MARRIAGE:				
After 10/74				
Nonparents	0.12	0.01	0.08	0.08
Parents	-0.07	-0.14	0.15	0.20
11/73 to 10/74				
Nonparents	0.07	0.04	0.11	0.12
Parents	-0.06	-0.37	0.14	0.17
6/72 to 10/73				
Nonparents	0.00	-0.27	0.11	0.11
Parents	0.04	-0.41	0.11	0.11
Before 6/72				
Nonparents	-0.05	0.30	0.26	0.30
Parents	-0.22	-0.39	0.18	0.18
	SINGLE MALES			
Nonparents	----	----	----	----
Parents	-0.03	0.39	0.18	0.22
After 10/74	-0.17	0.16	0.25	0.28
11/73-10/74	0.04	0.70	0.28	0.35
Before 10/73	0.40	0.56	0.51	0.69
	EVER MARRIED MALES			
Nonparents	0.31	0.48	0.06	0.08
Parents	0.34	0.38	0.07	0.09
After 10/74	0.26	0.33	0.09	0.11
11/73-10/74	0.50	0.41	0.12	0.16
Before 10/73	0.36	0.40	0.13	0.17
Prob. 6/72-10/73	0.35	0.43	0.15	0.19
Prob. before 6/72	0.40	0.29	0.28	0.37
TIMING OF FIRST MARRIAGE:				
After 10/74				
Nonparents	0.26	0.44	0.08	0.09
Parents	0.13	0.27	0.13	0.15
11/73 to 10/74				
Nonparents	0.39	0.57	0.11	0.15
Parents	0.25	0.36	0.12	0.15
6/72 to 10/73				
Nonparents	0.42	0.51	0.14	0.18
Parents	0.46	0.44	0.10	0.12
Before 6/72				
Nonparents	-0.11	0.65	0.67	0.82
Parents	0.69	0.41	0.22	0.27

Table 8.8

Results of the Analysis of Hourly Wage Rates for Employed NLS Respondents Who Were Married as of October 1973

Parenthood Status as of October 1976	Sample Means		Sample Sizes	
	1974	1976	1974	1976
	FEMALES			
Nonparents	2.74	3.48	452	459
Parents	2.77	3.24	598	550
After 10/74	2.76	3.40	235	139
11/73-10/74	2.94	3.24	109	146
Before 10/73	2.66	3.16	235	240
Prob. 6/72-10/73	2.69	3.12	165	166
Prob. before 6/72	2.59	3.27	70	74
	MALES			
Nonparents	3.80	4.87	210	213
Parents	3.95	4.77	568	575
After 10/74	3.88	4.84	155	152
11/73-10/74	4.10	4.70	168	166
Before 10/73	3.89	4.72	210	213
Prob. 6/72-10/73	3.86	4.75	165	169
Prob. before 6/72	3.99	4.59	45	44

Parenthood Status as of October 1976	Adjusted Means		Standard Errors	
	1974	1976	1974	1976
	FEMALES			
Nonparents	2.74	3.48	0.05	0.09
Parents	2.81	3.31	0.05	0.10
After 10/74	2.79	3.44	0.07	0.17
11/73-10/74	3.00	3.34	0.10	0.18
Before 10/73	2.70	3.25	0.08	0.15
Prob. 6/72-10/73	2.74	3.18	0.09	0.17
Prob. before 6/72	2.59	3.39	0.14	0.26
	MALES			
Nonparents	3.80	4.87	0.10	0.13
Parents	3.93	4.86	0.08	0.11
After 10/74	3.87	4.82	0.12	0.16
11/73-10/74	4.08	4.80	0.13	0.16
Before 10/73	3.87	4.86	0.13	0.17
Prob. 6/72-10/73	3.86	4.91	0.14	0.18
Prob. before 6/72	3.92	4.70	0.24	0.32

Parenthood Status as of October 1976	Differences from Married Nonparents		Standard Errors	
	1974	1976	1974	1976
	FEMALES			
Nonparents	----	----	----	----
Parents	0.07	-0.17	0.07	0.14
After 10/74	0.05	-0.04	0.08	0.20
11/73-10/74	0.26	-0.13	0.11	0.20
Before 10/73	-0.04	-0.23	0.09	0.18
Prob. 6/72-10/73	0.01	-0.30	0.10	0.19
Prob. before 6/72	-0.14	-0.09	0.14	0.28
	MALES			
Nonparents	----	----	----	----
Parents	0.13	-0.01	0.13	0.17
After 10/74	0.07	-0.06	0.16	0.21
11/73-10/74	0.28	-0.08	0.16	0.21
Before 10/73	0.07	-0.01	0.17	0.21
Prob. 6/72-10/73	0.05	0.03	0.17	0.22
Prob. before 6/72	0.12	-0.17	0.26	0.34

seniority on their jobs. But this comparative advantage was apparently short-lived. Among the ever married males in the NLS, the fathers had higher rates of pay than the nonfathers in 1974, but the opposite was true in 1976, when many of the nonfathers had completed their education and entered the labor force.

The adjusted means reported in Tables 8.6 and 8.8 allow for the effects of differences in background factors on wage rates. The adjustments are based upon regression equations reported in App. D. Those equations show that the respondents' background characteristics are poor predictors of hourly wage rates in 1974 or 1976 among either the single nonparents or the nonparents who married before October 1973. Since the regression equations are relatively "flat," the differences in the adjusted means across marital/parenthood categories are about the same as the differences in the raw means.

The intergroup differences in Tables 8.7 and 8.8 indicate large negative effects associated with motherhood and sizable positive effects for men associated with marriage. We conjecture that these effects result primarily from the fact that wage rates depend in part on experience and seniority. The patterns in Tables 8.7 and 8.8, in conjunction with the earlier findings that teenage parenthood adversely affects educational attainment and career progress, suggest that the long-term effects of teenage parenthood are more severe than the short-term effects reported here.

A thorough examination of the effects of early family formation on wage rates clearly requires a far more detailed analysis to allow for differences among young people in levels of experience and education, variations among local job markets, and other factors affecting rates of pay. That analysis is beyond the scope of this study and the NLS data.

FAMILY INCOME

On the third follow-up survey, the NLS participants were questioned about their sources of income in 1975 and 1976. Since the questionnaires for the third follow-up survey were mailed in October 1976, the 1976 income figures were estimates by the respondents for the entire year based upon incomplete data. Presumably, they were able to supply more reliable figures for 1975, perhaps by referring to their 1975 income tax statements.

Tables 8.9 and 8.10 provide the mean values by marital/parenthood category of the incomes reported by the NLS participants for 1975 and 1976. In interpreting these tables, one must bear in mind that lower values of the means can reflect higher proportions of zero values, so the mean values should not be interpreted as typical values.

It is clear from these tables that the primary sources of income are quite different for the various categories of respondents. In 1975, the single mothers among the NLS participants had average total incomes of only $3300, of which an average of $712 (21.5 percent of the total) was derived from public assis-

Table 8.9

Mean Values of the 1975 Income Measures by Marital and Parenthood Status

Parenthood Status as of October 1976	Sample Means						
	Own Wages	Spouse's Wages	Public Assist	Unemp. Comp.	Other	Total	Sample Size
SINGLE FEMALES							
Nonparents	3183	0	20	34	242	3478	3284
Parents	2479	0	712	50	59	3300	304
After 10/74	2243	0	642	63	64	3012	114
11/73-10/74	2339	0	780	23	79	3222	108
Before 10/73	2992	0	720	69	24	3805	82
Prob. 6/72-10/73	3465	0	558	99	8	4131	49
Prob. before 6/72	2290	0	961	24	47	3322	33
EVER MARRIED FEMALES							
Nonparents	4037	5734	6	90	283	10150	2056
Parents	2386	7066	86	139	225	9903	1786
After 10/74	2613	7087	32	166	257	10155	780
11/73-10/74	2093	7210	81	107	213	9704	436
Before 10/73	2304	7064	177	118	214	9877	486
Prob. 6/72-10/73	2244	6950	191	119	196	9700	344
Prob. before 6/72	2451	7339	143	116	259	10308	142
TIMING OF FIRST MARRIAGE:							
After 10/74							
Nonparents	3886	4519	3	61	317	8786	1043
Parents	2716	5741	104	163	177	8901	253
11/73 to 10/74							
Nonparents	4495	7312	20	104	214	12145	443
Parents	2566	7021	55	141	264	10047	361
6/72 to 10/73							
Nonparents	3944	6818	3	142	306	11213	489
Parents	2231	7447	89	133	232	10133	920
Before 6/72							
Nonparents	4270	6572	0	81	60	10983	72
Parents	2378	7155	104	136	200	9971	248
SINGLE MALES							
Nonparents	4489	0	18	99	271	4877	4336
Parents	4920	0	8	264	104	5297	183
After 10/74	4580	0	8	214	140	4941	106
11/73-10/74	5752	0	0	321	46	6119	60
Before 10/73	4110	0	42	379	82	4613	17
EVER MARRIED MALES							
Nonparents	6766	2391	8	144	286	9595	1520
Parents	7766	1368	33	133	139	9439	1174
After 10/74	7462	1493	41	125	151	9273	618
11/73-10/74	7919	997	25	132	119	9192	274
Before 10/73	8282	1536	31	180	112	10141	214
Prob. 6/72-10/73	8086	1554	41	177	145	10002	164
Prob. before 6/72	8925	1476	0	190	3	10594	50
TIMING OF FIRST MARRIAGE:							
After 10/74							
Nonparents	6389	2012	7	127	303	8838	1000
Parents	7031	1305	64	134	159	8693	288
11/73 to 10/74							
Nonparents	7574	3268	10	155	237	11244	307
Parents	7698	1503	30	124	144	9499	323
6/72 to 10/73							
Nonparents	7488	2896	10	217	274	10885	200
Parents	8106	1360	24	140	144	9774	468
Before 6/72							
Nonparents	4971	2786	0	0	100	7857	7
Parents	8672	1211	0	136	34	10054	88

Table 8.10

Mean Values of the 1976 Income Measures by Marital and Parenthood Status

Parenthood Status as of October 1976	Sample Means						
	Own Wages	Spouse's Wages	Public Assist	Unemp. Comp.	Other	Total	Sample Size
SINGLE FEMALES							
Nonparents	4386	0	19	32	262	4699	3190
Parents	3063	0	789	58	60	3970	299
After 10/74	2537	0	910	100	80	3626	113
11/73-10/74	3466	0	711	7	58	4242	110
Before 10/73	3263	0	721	70	33	4087	76
Prob. 6/72-10/73	3514	0	577	44	0	4136	45
Prob. before 6/72	2898	0	930	108	81	4017	31
EVER MARRIED FEMALES							
Nonparents	5045	7696	4	95	351	13192	1999
Parents	2535	7940	110	143	273	11000	1755
After 10/74	2272	8067	43	165	304	10851	774
11/73-10/74	2676	8177	128	139	265	11385	431
Before 10/73	2823	7628	193	107	255	11007	479
Prob. 6/72-10/73	2782	7482	214	120	218	10817	335
Prob. before 6/72	2919	7968	145	76	342	11451	144
TIMING OF FIRST MARRIAGE:							
After 10/74							
Nonparents	5100	7740	6	92	402	13340	1007
Parents	2543	7297	123	154	216	10334	245
11/73 to 10/74							
Nonparents	5272	8015	6	75	280	13648	431
Parents	2451	7953	77	152	264	10897	359
6/72 to 10/73							
Nonparents	4775	7430	0	127	349	12681	480
Parents	2405	8213	119	150	315	11201	907
Before 6/72							
Nonparents	4839	7556	0	61	113	12569	70
Parents	3157	7649	118	96	189	11210	239
SINGLE MALES							
Nonparents	5496	0	15	89	308	5908	4222
Parents	5388	0	22	221	138	5770	181
After 10/74	5124	0	19	280	179	5601	104
11/73-10/74	6073	0	1	119	86	6279	60
Before 10/73	4590	0	120	226	71	5006	17
EVER MARRIED MALES							
Nonparents	8346	3603	7	104	390	12451	1462
Parents	9229	1624	34	109	187	11183	1148
After 10/74	9262	1628	46	108	206	11250	600
11/73-10/74	9115	1511	24	111	132	10893	267
Before 10/73	9246	1810	24	125	201	11406	211
Prob. 6/72-10/73	9186	1889	7	83	255	11420	162
Prob. before 6/72	9446	1546	79	264	24	11358	49
TIMING OF FIRST MARRIAGE:							
After 10/74							
Nonparents	8162	3735	4	106	440	12447	963
Parents	9097	1655	73	103	217	11144	283
11/73 to 10/74							
Nonparents	8676	3562	12	123	268	12641	298
Parents	9018	1653	19	142	186	11018	314
6/72 to 10/73							
Nonparents	8885	3021	18	64	350	12338	188
Parents	9502	1621	27	102	202	11454	455
Before 6/72							
Nonparents	6043	2671	0	114	93	8921	7
Parents	9104	1574	1	46	33	10758	88

tance. As Sec. IX will show, a large percentage of the single mothers depended on their parents for financial support, and these income figures do not include parental contributions to support as sources of income.

The 1975 figures for ever married females by timing of marriage are difficult to interpret because some of the women who married after October 1974 were not married until after 1975, and their spouses' wages were therefore excluded. Table 8.10, which provides better comparisons, indicates that among the ever married women in 1976, the mothers had family incomes that averaged about $2200 below those for the nonmothers. An examination of the components of income shows that these differences in family incomes were attributable to the differences in wages between mothers and nonmothers.

A possible explanation for some of the differences in the average incomes across marital/parenthood categories is that the income figures for full-time students are included even though their earnings are usually limited while they attend college. Tables 8.11 and 8.12 provide the corresponding income figures when the data for the full-time students are excluded. With this change, the income advantage of childless couples over parents becomes even more apparent, again confirming that the differences in family income primarily result from differences in the wives' incomes.

SATISFACTION WITH FINANCIAL STATUS

On the second follow-up survey, the NLS participants were asked, "For the year of 1974, how satisfied as a whole have you been with the amount of money you have had to get along on?" As an index of satisfaction with financial status, their responses to this question were scored from 1 to 5 as follows:

Very dissatisfied	1
Somewhat dissatisfied	2
Neutral or no opinion	3
Somewhat satisfied	4
Very satisfied	5

Table 8.13 provides comparisons of the marital/parenthood categories on this measure. Given the meager income levels of the single mothers and their higher dependency on their parents for financial support, it is not surprising that these women are less satisfied as a group than other women.

Among the ever married NLS participants, the early parents were less satisfied with their financial situations in 1974 than those who became parents after October 1974. This pattern is confirmed in Table 8.14, which is restricted to those NLS participants who were married as of October 1973.

Table 8.11

Mean Values of the 1975 Income Measures (Excluding Full-Time Students) by Marital and Parenthood Status

Parenthood Status as of October 1976	Sample Means						
	Own Wages	Spouse's Wages	Public Assist	Unemp. Comp.	Other	Total	Sample Size
SINGLE FEMALES							
Nonparents	4793	0	10	59	88	4950	1687
Parents	2861	0	681	55	26	3623	250
After 10/74	2541	0	687	75	36	3340	95
11/73-10/74	2810	0	743	12	21	3585	85
Before 10/73	3358	0	598	81	18	4055	70
Prob. 6/72-10/73	3709	0	556	113	0	4378	43
Prob. before 6/72	2799	0	665	30	46	3540	27
EVER MARRIED FEMALES							
Nonparents	4722	6365	7	102	228	11423	1616
Parents	2416	7188	85	142	211	10042	1696
After 10/74	2671	7187	34	173	234	10298	751
11/73-10/74	2096	7367	63	108	214	9848	416
Before 10/73	2313	7222	187	118	199	10038	455
Prob. 6/72-10/73	2248	7093	201	117	173	9832	321
Prob. before 6/72	2468	7531	151	120	260	10531	134
TIMING OF FIRST MARRIAGE:							
After 10/74							
Nonparents	4915	5423	1	72	261	10671	733
Parents	2799	5859	115	184	115	9071	220
11/73 to 10/74							
Nonparents	4933	7300	23	116	159	12531	382
Parents	2598	7109	51	142	252	10151	351
6/72 to 10/73							
Nonparents	4263	7068	3	147	264	11747	428
Parents	2252	7524	85	135	227	10223	887
Before 6/72							
Nonparents	4556	7072	0	89	27	11744	66
Parents	2422	7373	110	137	183	10225	234
SINGLE MALES							
Nonparents	6250	0	12	145	119	6527	2453
Parents	5309	0	8	260	91	5668	153
After 10/74	5021	0	6	224	153	5403	90
11/73-10/74	6135	0	0	267	2	6404	49
Before 10/73	4276	0	51	460	7	4794	14
EVER MARRIED MALES							
Nonparents	7920	2477	8	179	206	10789	1145
Parents	7932	1342	31	133	132	9570	1101
After 10/74	7610	1491	42	123	147	9413	579
11/73-10/74	8030	1005	11	137	118	9302	263
Before 10/73	8510	1408	34	178	85	10215	198
Prob. 6/72-10/73	8365	1420	45	173	112	10114	149
Prob. before 6/72	8950	1374	0	194	3	10520	49
TIMING OF FIRST MARRIAGE:							
After 10/74							
Nonparents	7660	2225	5	167	223	10281	723
Parents	7285	1316	69	125	154	8948	266
11/73 to 10/74							
Nonparents	8468	2913	13	196	184	11773	243
Parents	7778	1473	16	130	145	9542	304
6/72 to 10/73							
Nonparents	8309	2854	12	213	175	11562	169
Parents	8267	1296	24	141	129	9859	441
Before 6/72							
Nonparents	6500	3200	0	0	0	9700	5
Parents	8867	1269	0	136	36	10309	84

Table 8.12

Mean Values of the 1976 Income Measures (Excluding Full-Time Students) by Marital and Parenthood Status

Parenthood Status as of October 1976	Sample Means						
	Own Wages	Spouse's Wages	Public Assist	Unemp. Comp.	Other	Total	Sample Size
SINGLE FEMALES							
Nonparents	5178	0	13	36	180	5408	2423
Parents	3499	0	786	70	21	4375	247
After 10/74	2793	0	949	116	30	3889	97
11/73-10/74	4198	0	730	9	14	4950	84
Before 10/73	3646	0	617	81	15	4359	66
Prob. 6/72-10/73	3882	0	566	51	0	4499	39
Prob. before 6/72	3305	0	692	124	37	4157	27
EVER MARRIED FEMALES							
Nonparents	5350	7788	4	97	316	13555	1830
Parents	2544	8059	98	141	252	11094	1696
After 10/74	2262	8080	44	161	291	10838	759
11/73-10/74	2725	8365	97	139	256	11583	414
Before 10/73	2837	7892	177	106	207	11218	453
Prob. 6/72-10/73	2757	7639	203	116	199	10914	320
Prob. before 6/72	3029	8500	114	80	227	11950	133
TIMING OF FIRST MARRIAGE:							
After 10/74							
Nonparents	5440	7832	6	95	367	13741	920
Parents	2510	7360	104	146	210	10331	233
11/73 to 10/74							
Nonparents	5517	7961	7	82	245	13812	397
Parents	2450	8012	72	153	215	10903	349
6/72 to 10/73							
Nonparents	5087	7678	0	123	321	13209	437
Parents	2413	8346	106	147	297	11311	877
Before 6/72							
Nonparents	4997	7556	0	65	22	12640	65
Parents	3226	7858	100	99	181	11464	232
SINGLE MALES							
Nonparents	6713	0	13	106	227	7059	3040
Parents	5779	0	26	248	122	6174	158
After 10/74	5456	0	21	302	157	5937	93
11/73-10/74	6457	0	1	138	90	6685	52
Before 10/73	5371	0	157	295	0	5823	13
EVER MARRIED MALES							
Nonparents	9075	3589	8	111	323	13106	1255
Parents	9399	1642	30	105	181	11357	1093
After 10/74	9710	1628	45	96	197	11375	568
11/73-10/74	9264	1505	11	116	136	11032	257
Before 10/73	9414	1890	25	130	185	11644	202
Prob. 6/72-10/73	9382	1987	8	86	239	11702	154
Prob. before 6/72	9516	1578	80	269	12	11456	48
TIMING OF FIRST MARRIAGE:							
After 10/74							
Nonparents	8913	3785	3	116	354	13172	817
Parents	9292	1646	73	80	214	11306	271
11/73 to 10/74							
Nonparents	9349	3321	14	124	249	13057	259
Parents	9204	1661	4	145	181	11196	300
6/72 to 10/73							
Nonparents	9595	3054	20	69	309	13047	167
Parents	9666	1662	28	104	193	11653	428
Before 6/72							
Nonparents	6467	3117	0	0	58	9642	6
Parents	9210	1611	1	47	27	10896	86

Table 8.13

Mean Values of the 1974 Financial Status Satisfaction Index by Marital and Parenthood Status

Parenthood Status as of October 1976	Sample Mean	Sample Size
	SINGLE FEMALES	
Nonparents	3.44	4085
Parents	2.83	395
After 10/74	2.84	148
11/73-10/74	2.85	137
Before 10/73	2.78	110
Prob. 6/72-10/73	2.98	65
Prob. before 6/72	2.49	45
	EVER MARRIED FEMALES	
Nonparents	3.58	2651
Parents	3.51	2419
After 10/74	3.63	1034
11/73-10/74	3.43	617
Before 10/73	3.37	696
Prob. 6/72-10/73	3.36	490
Prob. before 6/72	3.39	206
TIMING OF FIRST MARRIAGE:		
After 10/74		
Nonparents	3.51	1353
Parents	3.21	325
11/73 to 10/74		
Nonparents	3.74	577
Parents	3.54	481
6/72 to 10/73		
Nonparents	3.62	630
Parents	3.60	1269
Before 6/72		
Nonparents	3.34	86
Parents	3.42	339
	SINGLE MALES	
Nonparents	3.42	5286
Parents	3.01	205
After 10/74	3.03	104
11/73-10/74	2.94	80
Before 10/73	3.19	21
	EVER MARRIED MALES	
Nonparents	3.51	1832
Parents	3.29	1438
After 10/74	3.42	760
11/73-10/74	3.24	353
Before 10/73	3.01	276
Prob. 6/72-10/73	3.03	215
Prob. before 6/72	2.95	61
TIMING OF FIRST MARRIAGE:		
After 10/74		
Nonparents	3.52	1178
Parents	3.45	343
11/73 to 10/74		
Nonparents	3.51	393
Parents	3.29	395
6/72 to 10/73		
Nonparents	3.49	249
Parents	3.23	589
Before 6/72		
Nonparents	3.44	9
Parents	3.19	105

Table 8.14

Mean Values of the 1974 Financial Status Satisfaction Index Among NLS Respondents Who Were Married as of October 1973

Parenthood Status as of October 1976	Sample Mean	Sample Size
	FEMALES	
Nonparents	3.58	716
Parents	3.56	1608
After 10/74	3.78	468
11/73-10/74	3.50	452
Before 10/73	3.41	617
Prob. 6/72-10/73	3.42	434
Prob. before 6/72	3.41	183
	MALES	
Nonparents	3.48	258
Parents	3.22	694
After 10/74	3.46	181
11/73-10/74	3.24	213
Before 10/73	3.02	255
Prob. 6/72-10/73	3.04	197
Prob. before 6/72	2.97	58

IX. DEPENDENCE ON PARENTS AND SOCIETY

The ages encompassed by the NLS data (17 to 22) mark a time of transition from the dependence of childhood and adolescence to adult independence. During this period, most young people leave their parents' homes and begin the task of choosing and preparing for their adult roles. Most also develop skills and training that provide the basis for economic self-sufficiency.

By thrusting young people into adult responsibilities for which they may be ill prepared, early family formation can interfere with the normal progression to full independence. This section provides our analysis of the effects of teenage marriage and parenthood on young people's continued dependence on their parents or on society. Three types of dependence are examined: residential and financial dependence on parents, and welfare dependence on society (the latter, of course, being a specialized form of financial dependence).

Measures of residential and financial dependence are available for all three NLS follow-up surveys (1973, 1974, and 1976). Respondents were asked, "With whom did you live as of the first week of October 19— (year of survey)?" Responses were coded as indicating residential dependence if the respondent circled "parents" or "with other relatives" in 1973, or "with my parents," "with parents and husband or wife," or "with other relatives" in 1974 and 1976. Unlike the later questionnaires, the 1973 questionnaire did not provide respondents with the option of stating that they lived with both parents *and* spouse. Obviously, caution is needed in comparing responses in 1973 with those in later years. Financial dependence on parents or other relatives was determined from responses to the question, "As of the first week of October 19—, were you dependent upon your parents or any other friends or relatives for more than one-half of your financial support?" For the 1976 questionnaire, this question was altered to include dependence on spouse, and separate (yes/no) response alternatives were provided for parents, spouse, and other relatives or friends.

Welfare dependence was measured only on the 1976 survey. Respondents were asked to provide information about the total amount of income received from public assistance or welfare (including spouse's income) for 1975 and 1976. For purposes of the analysis reported here, responses were coded as indicating dependence on welfare if the respondent reported any income from this source.

RESIDENTIAL DEPENDENCE

Table 9.1 reports the percentages of respondents who lived at home or with other relatives during 1973, 1974, and 1976. Not surprisingly, the figures reveal enormous effects due to marriage. The overwhelming majority of respon-

Table 9.1

Percentages of Respondents Who Live at Home by Marital and Parenthood Status

Parenthood Status as of October 1976	Percentage			Sample Sizes		
	1973	1974	1976	1973	1974	1976
SINGLE FEMALES						
Nonparents	58.1	50.7	51.3	3995	4112	4240
Parents	74.8	68.6	58.1	393	398	403
After 10/74	76.2	72.5	58.5	151	149	164
11/73-10/74	77.3	65.5	59.7	132	142	134
Before 10/73	70.0	67.3	55.2	110	107	105
Prob. 6/72-10/73	80.0	70.8	59.4	65	65	64
Prob. before 6/72	55.6	61.9	48.8	45	42	41
EVER MARRIED FEMALES						
Nonparents	48.3	31.5	6.7	2619	2640	2751
Parents	30.2	19.1	10.4	2450	2429	2489
After 10/74	43.6	23.1	7.6	1030	1031	1086
11/73-10/74	22.7	18.2	12.0	644	622	601
Before 10/73	17.7	15.5	13.3	751	703	697
Prob. 6/72-10/73	16.8	15.6	13.0	529	493	492
Prob. before 6/72	19.8	15.2	14.1	222	210	205
TIMING OF FIRST MARRIAGE:						
After 10/74						
Nonparents	61.2	52.7	5.5	1308	1350	1380
Parents	69.5	63.0	9.5	325	324	337
11/73 to 10/74						
Nonparents	67.9	7.5	5.8	583	575	602
Parents	73.6	16.9	12.3	488	484	511
6/72 to 10/73						
Nonparents	7.7	9.6	8.7	626	625	670
Parents	8.7	10.3	9.8	1285	1272	1292
Before 6/72						
Nonparents	15.9	17.6	14.1	88	85	92
Parents	10.8	13.1	10.5	343	343	343
SINGLE MALES						
Nonparents	59.3	52.0	49.1	5236	5323	5633
Parents	68.3	57.6	47.8	205	205	226
After 10/74	64.7	64.5	43.7	116	107	126
11/73-10/74	73.8	49.4	46.8	65	77	77
Before 10/73	70.8	52.4	73.9	24	21	23
EVER MARRIED MALES						
Nonparents	56.2	37.7	6.9	1801	1845	1984
Parents	39.9	22.8	8.6	1478	1444	1561
After 10/74	54.6	31.6	8.4	765	759	837
11/73-10/74	33.1	14.1	6.1	360	354	344
Before 10/73	13.4	10.8	11.8	329	279	296
Prob. 6/72-10/73	13.4	11.1	11.9	253	216	227
Prob. before 6/72	13.2	9.5	11.6	76	63	69
TIMING OF FIRST MARRIAGE:						
After 10/74						
Nonparents	62.0	53.7	5.7	1156	1190	1271
Parents	71.6	60.9	10.3	335	345	379
11/73 to 10/74						
Nonparents	68.4	9.1	7.9	383	394	420
Parents	72.0	13.5	6.9	389	393	420
6/72 to 10/73						
Nonparents	11.2	6.9	10.1	240	248	278
Parents	9.3	9.3	8.4	627	590	634
Before 6/72						
Nonparents	10.0	20.0	20.0	10	10	10
Parents	8.1	10.1	9.7	123	109	124

dents who married left their parental homes, and presumably formed their own households. This was true of those who married early as well as those who married later. For example, 90 percent of the respondents (both women and men) who married before October 1973 were no longer living with parents or relatives at that time. By 1976, the percentage living on their own had increased only slightly. Although women who married before June 1972 were somewhat more likely than later-marrying women to remain at home, the difference was very small. The data indicate that early marriage does not, as a rule, lead to continued residential dependence.

In contrast, the percentages of single respondents who stayed at home remained high throughout the four years. Even in 1976, about half of all single respondents were still living at home. Thus, marriage seems to be the most important impetus for leaving the parental household.

Compared with the enormous effects associated with marriage, parenthood effects are quite small. Recently married parents of both sexes are somewhat more likely than other recently married respondents to maintain residence with their parents. The effect associated with being a parent, however, is fairly small among the married, and seems to lessen over time. Among single women, the relationship between parenthood and residential dependence is somewhat greater. About two-thirds of all women who became single mothers were living at home in 1974, and more than half were still living at home in 1976.

In general, the results suggest that whatever additional burdens are imposed on the parents of "kids with kids," the continued provision of residential services is not as frequent as one might suppose—except in the case of unwed mothers.

FINANCIAL DEPENDENCE

The NLS provides an indication of financial dependence on parents and other relatives by asking respondents whether they received more than half their support from such sources in each of the three years covered by the follow-up surveys. Clearly, this introduces a high threshold for the reporting of parental support. Many respondents may have received substantial amounts of financial assistance without crossing this reporting threshold.

Table 9.2 displays the percentages of respondents who received more than half their support from parents or other relatives in 1973, 1974, and 1976. Note the substantial drop in these percentages between October 1974 and October 1976 for all married respondents. We suspect that at least part of this drop may result from the change in the wording of the relevant survey item, described earlier.

The figures in Table 9.2 reveal substantial marriage effects in the direction of reduced parental support for both men and women after marriage. This could reflect either a reduction in the absolute amount of support provided by parents and relatives, or an increase in the amount of self-provided support, or both.

Table 9.2

Percentages of Respondents Who Are Financially Dependent on Parents and Relatives by Marital and Parenthood Status

Parenthood Status as of October 1976	Percentage			Sample Sizes		
	1973	1974	1976	1973	1974	1976
SINGLE FEMALES						
Nonparents	60.6	50.2	32.4	4076	4084	4278
Parents	45.9	26.2	24.4	392	393	422
After 10/74	40.7	31.5	31.0	150	146	168
11/73-10/74	57.3	26.8	23.6	131	138	144
Before 10/73	39.6	18.3	15.5	111	109	110
Prob. 6/72-10/73	45.5	23.1	15.4	66	65	65
Prob. before 6/72	31.1	11.4	15.6	45	44	45
EVER MARRIED FEMALES						
Nonparents	43.0	34.2	5.1	2611	2649	2396
Parents	29.9	28.8	5.0	2393	2414	2011
After 10/74	32.6	27.9	3.5	1019	1030	880
11/73-10/74	29.7	31.0	5.1	630	617	475
Before 10/73	26.0	28.1	7.1	720	695	579
Prob. 6/72-10/73	26.8	28.8	7.8	500	490	410
Prob. before 6/72	24.1	26.3	5.3	220	205	169
TIMING OF FIRST MARRIAGE:						
After 10/74						
Nonparents	53.9	44.3	4.3	1329	1351	1210
Parents	47.1	38.6	5.2	327	321	290
11/73 to 10/74						
Nonparents	45.0	26.8	2.7	589	579	518
Parents	43.0	28.6	5.8	493	482	413
6/72 to 10/73						
Nonparents	19.5	21.9	7.7	594	627	572
Parents	21.5	27.1	4.8	1231	1266	1029
Before 6/72						
Nonparents	25.6	18.4	11.1	86	87	81
Parents	24.0	25.6	4.4	333	340	270
SINGLE MALES						
Nonparents	49.8	41.5	26.7	5279	5271	5711
Parents	32.9	23.4	16.5	207	201	237
After 10/74	32.5	27.6	16.5	117	105	133
11/73-10/74	31.8	19.7	12.5	66	76	80
Before 10/73	37.5	15.0	29.2	24	20	24
EVER MARRIED MALES						
Nonparents	32.6	21.0	3.3	1810	1835	1981
Parents	15.8	7.7	2.4	1477	1432	1576
After 10/74	22.2	10.6	2.1	771	755	841
11/73-10/74	11.7	5.1	3.7	358	351	352
Before 10/73	5.2	3.3	2.0	325	276	297
Prob. 6/72-10/73	5.6	2.8	2.2	250	215	228
Prob. before 6/72	4.0	4.9	1.4	75	61	69
TIMING OF FIRST MARRIAGE:						
After 10/74						
Nonparents	38.6	28.8	3.1	1169	1179	1268
Parents	29.7	17.6	3.4	337	340	383
11/73 to 10/74						
Nonparents	29.9	7.3	3.4	385	396	417
Parents	23.5	6.4	1.4	392	392	426
6/72 to 10/73						
Nonparents	9.3	6.9	4.7	236	248	276
Parents	4.5	3.6	2.4	624	587	636
Before 6/72						
Nonparents	0.0	0.0	0.0	130 10	9	10
Parents	10.8	3.7	3.3	120	107	122

Many of the single respondents were still in school and had little or no earned income, whereas married respondents were more likely to be working.

Comparison of the percentages of married parents and nonparents who were financially dependent reveals that the parents were generally less likely to be receiving most of their financial support from parents or relatives. Again, this difference could reflect greater support from other sources or less support from parents and relatives. The data do establish, however, that young people who become parents are less likely than those who remain single or those who marry without having children to rely primarily on their parents or relatives for support.

WELFARE DEPENDENCE

Table 9.3 reports the percentages of NLS respondents who received public assistance or welfare income during 1975 and 1976, by sex and marital/parenthood category. The table's message is clear: The major determinant of status as a welfare recipient is single motherhood. To a large extent, this finding is an inevitable consequence of the rules determining welfare eligibility, which make it difficult for nonparent or two-parent households to qualify for benefits. Nevertheless, the fact that so many single mothers tracked by the NLS became dependent on welfare attests to the magnitude of the difficulties such women face—difficulties that have been documented by others (Furstenberg, 1976b).

A surprising feature of Table 9.3 is the relatively minor role that the timing of parenthood seems to play in determining whether single mothers become welfare-dependent. In 1976, for example, 51 percent of the earliest single mothers (those whose first child was probably born before June 1972) were receiving public assistance, compared with 44 percent of those whose first child was born after October 1974. It seems to make little difference whether a single woman becomes pregnant during high school or two years thereafter; she stands an excellent chance of becoming dependent on public assistance either way.[1]

Among ever married women, who were considerably less likely to report public assistance income in either year, the *relative* importance of the timing of parenthood is much greater. The ever married women who gave birth before October 1973 were more than three times as likely to be on welfare in 1976 (12.1 percent) as those who gave birth after October 1974 (3.4 percent). We suspect that, for married women, the relationship between timing of parenthood and receipt of public assistance is largely mediated by divorce; women who marry

[1]Of course, more precise estimates of the effects of timing of parenthood would require multivariate analyses of longitudinal data. In 1975 and 1976, many of the single women who bore their first child before June 1972 may have become less dependent on welfare than they were at some earlier time. The NLS data do not permit us to examine this possibility.

Table 9.3

Percentages of Welfare Recipients by Marital and Parenthood Status

Parenthood Status as of October 1976	Percentage		Sample Sizes	
	1975	1976	1975	1976
SINGLE FEMALES				
Nonparents	1.7	1.9	3544	3440
Parents	39.6	45.6	351	349
After 10/74	32.4	43.7	136	135
11/73-10/74	43.4	46.7	122	122
Before 10/73	45.2	46.7	93	92
Prob. 6/72-10/73	41.1	43.4	56	53
Prob. before 6/72	51.4	51.3	37	39
EVER MARRIED FEMALES				
Nonparents	0.6	0.9	2208	2159
Parents	5.7	7.0	1976	1940
After 10/74	3.1	3.4	868	853
11/73-10/74	5.8	7.1	480	464
Before 10/73	9.3	12.1	546	544
Prob. 6/72-10/73	9.8	12.9	386	388
Prob. before 6/72	8.1	10.3	160	156
TIMING OF FIRST MARRIAGE:				
After 10/74				
Nonparents	0.5	0.9	1117	1083
Parents	7.9	7.9	278	267
11/73 to 10/74				
Nonparents	1.2	1.1	481	468
Parents	5.2	5.5	405	403
6/72 to 10/73				
Nonparents	0.4	0.8	522	519
Parents	5.0	6.9	1009	993
Before 6/72				
Nonparents	0.0	0.0	77	77
Parents	7.2	8.9	279	271
SINGLE MALES				
Nonparents	1.5	1.6	4583	4457
Parents	2.5	4.6	198	197
After 10/74	2.7	4.5	112	111
11/73-10/74	1.5	3.0	66	66
Before 10/73	5.0	10.0	20	20
EVER MARRIED MALES				
Nonparents	0.9	0.8	1595	1544
Parents	2.6	3.2	1253	1225
After 10/74	3.0	4.2	662	646
11/73-10/74	2.4	2.5	287	279
Before 10/73	1.7	2.2	231	226
Prob. 6/72-10/73	2.3	1.7	177	175
Prob. before 6/72	0.0	3.9	54	51
TIMING OF FIRST MARRIAGE:				
After 10/74				
Nonparents	0.8	0.8	1054	1012
Parents	4.2	7.0	311	302
11/73 to 10/74				
Nonparents	0.9	0.9	320	316
Parents	2.3	2.4	342	337
6/72 to 10/73				
Nonparents	1.5	1.0	206	201
Parents	2.2	1.9	498	486
Before 6/72				
Nonparents	0.0	0.0	7	7
Parents	0.0	1.1	94	92

early are at greater risk of divorce and, in addition, have had a longer period of exposure to that risk at any given point in time.[2]

Direct comparison between the ever married and the single mothers in Table 9.3 suggests that marriage has an important bearing on how early parenthood affects the long-term probability of welfare dependence. Women who had their first child before October 1973 were about four times as likely to be receiving public assistance in 1976 if they were unmarried than if they were married.

Clearly, an important concern in future analyses should be to determine whether the long-term "risk" of welfare dependence is reduced by teenage marriage that ends in divorce.

---

[2]Of the NLS respondents who became parents before October 1973, 17.3 percent were divorced or separated in October 1976, compared with 5.7 percent of those married between October 1974 and October 1976.

X. FERTILITY

FAMILY SIZE IN OCTOBER 1976

Previous studies have shown that women who start childbearing as adolescents bear more children, have them closer together, and bear more unwanted children than those who begin childbearing later in life. The strong association between timing of first birth and later family size holds whether or not one allows for differences in background characteristics of the mother in examining the relationship. Moore and Hofferth (1978), for example, found that age at first birth is an important predictor of number of children after controlling for the mother's educational level, number of siblings, socioeconomic status, and religion.

However, there has been a general decline in birth expectations during the last ten years that parallels the decline in actual fertility, and it may be the case that, among today's youth, age at first birth is not as valid a predictor of completed family size as it was previously. The Bureau of the Census (1979b) reports that the average number of children expected by wives 18 to 34 years of age dropped from 3.1 in 1967 to 2.3 in 1978; the corresponding average for younger wives 18 to 24 years old dropped from 2.9 in 1967 to 2.2 in 1978. The average number of births expected by all women of age 18 to 24 in 1978 was 2.0. The figure was only slightly higher (2.1) among 18-to-24-year-old women who did not graduate from high school, and it was the same for college graduates as it was for women who just completed high school.

Table 10.1 shows the average number of children among the NLS participants by marital/parenthood category as of October 1973, 1974, and 1976. There is an apparent anomaly in Table 10.1 in that the entries for the single fathers would suggest that they have shrinking family sizes. The reason is that a few men who reported having one or more children on one of the surveys later reported having no children. Although it is possible that a few fathers lost their children through death, it is more likely that the single males simply elected not to report earlier births in answering the somewhat ambiguous question, "As of the first week of October 1976, how many children did you have?"

As the figures in the table suggest, some of the "early parents" (those who became parents before October 1973) had a good head start on the others in numbers of births. Among the ever married women in this group, 48.3 percent had two or more children by October 1976 and 8.2 percent had three or more. Among the ever married women who were classified as probable mothers in June 1972, 13.8 percent had three or more children in October 1976.

There are some reasons to expect that the early mothers in the Class of 1972 will have larger completed family sizes. Unlike most teenagers, a teenage mother must devote much of her time and energy to child care and homemaking (Presser, 1971). This may lead her to center her life on motherhood and set aside

Table 10.1

Mean Values of Number of Children by Marital and Parenthood Status

Parenthood Status as of October 1976	Sample Means 1973	1974	1976	Sample Sizes 1973	1974	1976
SINGLE FEMALES						
Nonparents	0.00	0.00	0.00	4332	4332	4332
Parents	0.30	0.68	1.14	429	429	429
After 10/74	0.00	0.00	1.09	171	171	171
11/73-10/74	0.00	1.07	1.07	147	147	147
Before 10/73	1.16	1.22	1.33	111	111	111
Prob. 6/72-10/73	1.00	1.06	1.15	66	66	66
Prob. before 6/72	1.40	1.44	1.60	45	45	45
EVER MARRIED FEMALES						
Nonparents	0.00	0.00	0.00	2822	2822	2822
Parents	0.32	0.65	1.28	2569	2614	2558
After 10/74	0.00	0.00	1.10	1113	1115	1115
11/73-10/74	0.00	1.05	1.26	669	669	619
Before 10/73	1.09	1.22	1.57	759	759	715
Prob. 6/72-10/73	1.00	1.13	1.48	532	532	505
Prob. before 6/72	1.29	1.44	1.78	227	227	210
TIMING OF FIRST MARRIAGE:						
After 10/74						
Nonparents	0.00	0.00	0.00	1411	1411	1411
Parents	0.10	0.24	1.11	351	351	349
11/73 to 10/74						
Nonparents	0.00	0.00	0.00	618	618	618
Parents	0.10	0.38	1.17	529	516	517
6/72 to 10/73						
Nonparents	0.00	0.00	0.00	683	683	683
Parents	0.34	0.75	1.30	1327	1371	1333
Before 6/72						
Nonparents	0.00	0.00	0.00	94	94	94
Parents	0.81	1.08	1.55	353	368	348
SINGLE MALES						
Nonparents	0.00	0.00	0.00	5801	5801	5801
Parents	0.11	0.45	1.05	239	239	239
After 10/74	0.00	0.00	1.15	135	135	135
11/73-10/74	0.00	1.13	0.94	80	80	80
Before 10/73	1.08	0.75	0.83	24	24	24
EVER MARRIED MALES						
Nonparents	0.00	0.00	0.00	2045	2045	2045
Parents	0.23	0.54	1.30	1606	1627	1613
After 10/74	0.00	0.00	1.14	858	858	858
11/73-10/74	0.00	1.07	1.38	390	390	359
Before 10/73	1.11	1.21	1.58	334	331	307
Prob. 6/72-10/73	1.06	1.16	1.53	258	255	236
Prob. before 6/72	1.29	1.37	1.73	76	76	71
TIMING OF FIRST MARRIAGE:						
After 10/74						
Nonparents	0.00	0.00	0.00	1306	1306	1306
Parents	0.02	0.11	1.22	390	390	390
11/73 to 10/74						
Nonparents	0.00	0.00	0.00	429	429	429
Parents	0.03	0.34	1.20	447	429	437
6/72 to 10/73						
Nonparents	0.00	0.00	0.00	288	288	288
Parents	0.34	0.77	1.34	641	670	650
Before 6/72						
Nonparents	0.00	0.00	0.00	10	10	10
Parents	1.04	1.22	1.66	124	130	127

her educational and career goals. Later, having fallen behind her classmates in education, and recognizing that her parental responsibilities may limit her career opportunities, she may favor further childbearing as a natural continuation of her motherhood role.

While this scenario linking teenage parenthood to larger family sizes may still hold true in many cases, we doubt that it applies as broadly today as it may have in the past. There has been a substantial expansion in child-care facilities that has helped young mothers act as both homemakers and employees. Also, women's attitudes toward homemaking as a career have changed, and there has been a drive for more equality in the labor market. As was seen earlier, more than half of the early mothers in the NLS were employed in October 1976. Also, the early mothers in the NLS, being high school graduates, differ in many respects from the early mothers who dropped out of school. It is more likely that the above scenario linking teenage parenthood to larger family sizes applies more often to the dropouts.

EXPECTED FAMILY SIZE

To examine the effects of early parenthood upon subsequent fertility, we shall focus on the NLS participants' expected family sizes as of 1973 and 1976. On the first and third follow-up surveys, the NLS participants were asked, "How many children altogether do you eventually expect to have?" The mean values of the responses by marital/parenthood category are given in Table 10.2.

The differences in the means are surprisingly small, and there is little evidence of a link between timing of parenthood and expected family size. This would imply that the early parents, even though many of them already have two or more children, plan to stop having children at an early age.

The adjusted mean values reported in Table 10.3 are calculated using a regression equation in App. D that relates expected family size to background factors. The equation includes number of siblings and an indicator variable for Catholics as independent variables, both of which have highly significant regression coefficients.

Table 10.4 reveals that the differences in the 1976 adjusted means from the mean for the single nonparents also existed for the most part in 1973. An exception to this rule is the group of mothers who were classified as probable mothers before June 1972. Here the shift in expected number of children between 1973 and 1976 probably results from the fact that, in many cases, their reported expected family sizes in 1973 were equalled or exceeded in 1976. With the exception of this group, the stability in the intergroup differences between 1973 and 1976 suggests that the participants' 1976 family sizes were relatively consistent with their long-term plans.

A slightly different pattern emerges when the second control group is used. See Table 10.5. At first glance, the pattern of intergroup differences would seem to indicate that the parents had increased their expected family sizes between

Table 10.2

Mean Values of Expected Number of Children by Marital and Parenthood Status

Parenthood Status as of October 1976	Sample Means		Sample Sizes	
	1973	1976	1973	1976
SINGLE FEMALES				
Nonparents	2.22	2.21	3914	4165
Parents	2.09	2.31	382	412
After 10/74	2.27	2.29	151	163
11/73-10/74	1.94	2.25	125	142
Before 10/73	2.03	2.42	106	107
Prob. 6/72-10/73	1.92	2.23	63	65
Prob. before 6/72	2.19	2.71	43	42
EVER MARRIED FEMALES				
Nonparents	2.27	2.16	2592	2772
Parents	2.35	2.40	2433	2503
After 10/74	2.44	2.43	1025	1085
11/73-10/74	2.30	2.31	639	607
Before 10/73	2.28	2.42	748	703
Prob. 6/72-10/73	2.28	2.35	525	494
Prob. before 6/72	2.27	2.59	223	209
TIMING OF FIRST MARRIAGE:				
After 10/74				
Nonparents	2.35	2.31	1289	1384
Parents	2.36	2.54	318	340
11/73 to 10/74				
Nonparents	2.28	2.04	584	609
Parents	2.43	2.38	485	507
6/72 to 10/73				
Nonparents	2.14	1.98	617	673
Parents	2.35	2.37	1276	1301
Before 6/72				
Nonparents	2.08	1.87	89	93
Parents	2.22	2.41	345	345
SINGLE MALES				
Nonparents	2.01	2.18	4812	5456
Parents	2.04	2.71	188	224
After 10/74	2.01	2.60	105	127
11/73-10/74	1.97	2.86	63	74
Before 10/73	2.40	2.87	20	23
EVER MARRIED MALES				
Nonparents	2.16	2.20	1713	1989
Parents	2.28	2.42	1420	1562
After 10/74	2.25	2.42	729	831
11/73-10/74	2.28	2.34	355	350
Before 10/73	2.34	2.45	324	298
Prob. 6/72-10/73	2.33	2.46	252	229
Prob. before 6/72	2.39	2.39	72	69
TIMING OF FIRST MARRIAGE:				
After 10/74				
Nonparents	2.16	2.30	1092	1271
Parents	2.12	2.55	313	381
11/73 to 10/74				
Nonparents	2.20	2.11	363	415
Parents	2.31	2.45	362	422
6/72 to 10/73				
Nonparents	2.11	1.88	238	282
Parents	2.34	2.30	622	628
Before 6/72				
Nonparents	1.70	2.10	10	10
Parents	2.27	2.46	119	122

Table 10.3

Adjusted Mean Values of Expected Number of Children by Marital and Parenthood Status

Parenthood Status as of October 1976	Adjusted Means		Standard Errors	
	1973	1976	1973	1976
SINGLE FEMALES				
Nonparents	2.22	2.21	0.02	0.02
Parents	2.11	2.24	0.07	0.07
After 10/74	2.28	2.20	0.10	0.11
11/73-10/74	1.96	2.21	0.11	0.12
Before 10/73	2.05	2.34	0.11	0.13
Prob. 6/72-10/73	1.95	2.15	0.15	0.17
Prob. before 6/72	2.19	2.62	0.18	0.21
EVER MARRIED FEMALES				
Nonparents	2.31	2.21	0.02	0.03
Parents	2.38	2.42	0.03	0.03
After 10/74	2.47	2.46	0.04	0.04
11/73-10/74	2.33	2.31	0.05	0.06
Before 10/73	2.31	2.43	0.04	0.05
Prob. 6/72-10/73	2.31	2.37	0.05	0.06
Prob. before 6/72	2.32	2.59	0.08	0.09
TIMING OF FIRST MARRIAGE:				
After 10/74				
Nonparents	2.36	2.35	0.03	0.04
Parents	2.37	2.53	0.06	0.07
11/73 to 10/74				
Nonparents	2.31	2.08	0.05	0.05
Parents	2.44	2.38	0.05	0.06
6/72 to 10/73				
Nonparents	2.21	2.06	0.05	0.05
Parents	2.39	2.39	0.04	0.04
Before 6/72				
Nonparents	2.19	1.97	0.12	0.14
Parents	2.30	2.47	0.06	0.08
SINGLE MALES				
Nonparents	2.01	2.18	0.02	0.02
Parents	2.02	2.48	0.09	0.10
After 10/74	1.98	2.35	0.11	0.12
11/73-10/74	1.93	2.62	0.14	0.16
Before 10/73	2.48	2.72	0.25	0.28
EVER MARRIED MALES				
Nonparents	2.21	2.24	0.03	0.03
Parents	2.36	2.40	0.03	0.04
After 10/74	2.33	2.43	0.04	0.05
11/73-10/74	2.36	2.29	0.06	0.07
Before 10/73	2.42	2.40	0.06	0.08
Prob. 6/72-10/73	2.40	2.42	0.07	0.09
Prob. before 6/72	2.46	2.32	0.13	0.16
TIMING OF FIRST MARRIAGE:				
After 10/74				
Nonparents	2.20	2.33	0.03	0.04
Parents	2.16	2.46	0.06	0.07
11/73 to 10/74				
Nonparents	2.27	2.18	0.06	0.07
Parents	2.39	2.44	0.06	0.07
6/72 to 10/73				
Nonparents	2.22	1.96	0.07	0.08
Parents	2.43	2.31	0.05	0.06
Before 6/72				
Nonparents	1.84	2.25	0.35	0.42
Parents	2.37	2.44	0.10	0.12

Table 10.4

Intergroup Differences in Adjusted Means for Expected Number of Children

Parenthood Status as of October 1976	Differences from Single Nonparents		Standard Errors	
	1973	1976	1973	1976
SINGLE FEMALES				
Nonparents	----	----	----	----
Parents	-0.10	0.03	0.07	0.08
After 10/74	0.06	-0.01	0.10	0.11
11/73-10/74	-0.25	0.00	0.11	0.12
Before 10/73	-0.16	0.13	0.12	0.14
Prob. 6/72-10/73	-0.26	-0.07	0.15	0.17
Prob. before 6/72	-0.02	0.41	0.18	0.21
EVER MARRIED FEMALES				
Nonparents	0.09	0.00	0.03	0.03
Parents	0.17	0.20	0.03	0.04
After 10/74	0.25	0.24	0.04	0.05
11/73-10/74	0.11	0.09	0.05	0.06
Before 10/73	0.09	0.22	0.05	0.06
Prob. 6/72-10/73	0.09	0.15	0.06	0.07
Prob. before 6/72	0.10	0.38	0.08	0.10
TIMING OF FIRST MARRIAGE:				
After 10/74				
Nonparents	0.15	0.13	0.04	0.04
Parents	0.16	0.32	0.07	0.08
11/73 to 10/74				
Nonparents	0.09	-0.13	0.05	0.06
Parents	0.23	0.16	0.06	0.06
6/72 to 10/73				
Nonparents	-0.01	-0.16	0.05	0.06
Parents	0.17	0.18	0.04	0.05
Before 6/72				
Nonparents	-0.02	-0.25	0.12	0.14
Parents	0.08	0.26	0.07	0.08
SINGLE MALES				
Nonparents	----	----	----	----
Parents	0.01	0.29	0.09	0.10
After 10/74	-0.03	0.16	0.11	0.12
11/73-10/74	-0.08	0.44	0.15	0.16
Before 10/73	0.47	0.54	0.25	0.28
EVER MARRIED MALES				
Nonparents	0.20	0.06	0.03	0.04
Parents	0.35	0.21	0.04	0.04
After 10/74	0.32	0.24	0.05	0.05
11/73-10/74	0.35	0.11	0.06	0.08
Before 10/73	0.40	0.21	0.07	0.08
Prob. 6/72-10/73	0.39	0.24	0.07	0.09
Prob. before 6/72	0.45	0.14	0.13	0.16
TIMING OF FIRST MARRIAGE:				
After 10/74				
Nonparents	0.19	0.15	0.04	0.04
Parents	0.15	0.28	0.07	0.07
11/73 to 10/74				
Nonparents	0.26	0.00	0.06	0.07
Parents	0.38	0.25	0.06	0.07
6/72 to 10/73				
Nonparents	0.21	-0.22	0.08	0.08
Parents	0.42	0.13	0.05	0.06
Before 6/72				
Nonparents	-0.17	0.07	0.35	0.42
Parents	0.36	0.26	0.11	0.12

Table 10.5

Results of the Analysis of Expected Number of Children for NLS Respondents Who Were Married as of October 1973

Parenthood Status as of October 1976	Sample Means		Sample Sizes	
	1973	1976	1973	1976
	FEMALES			
Nonparents	2.13	1.96	706	766
Parents	2.33	2.38	1621	1646
After 10/74	2.42	2.37	450	484
11/73-10/74	2.31	2.32	490	446
Before 10/73	2.27	2.40	670	625
Prob. 6/72-10/73	2.28	2.34	470	441
Prob. before 6/72	2.23	2.54	200	184
	MALES			
Nonparents	2.10	1.89	248	292
Parents	2.33	2.33	741	750
After 10/74	2.39	2.20	192	197
11/73-10/74	2.28	2.26	238	215
Before 10/73	2.33	2.41	306	277
Prob. 6/72-10/73	2.31	2.42	235	211
Prob. before 6/72	2.38	2.38	71	66

Parenthood Status as of October 1976	Adjusted Means		Standard Errors	
	1973	1976	1973	1976
	FEMALES			
Nonparents	2.13	1.96	0.03	0.04
Parents	2.31	2.34	0.03	0.03
After 10/74	2.42	2.36	0.04	0.05
11/73-10/74	2.29	2.27	0.04	0.06
Before 10/73	2.25	2.34	0.04	0.05
Prob. 6/72-10/73	2.26	2.28	0.04	0.06
Prob. before 6/72	2.22	2.46	0.07	0.09
	MALES			
Nonparents	2.10	1.89	0.05	0.07
Parents	2.31	2.33	0.04	0.06
After 10/74	2.37	2.20	0.06	0.08
11/73-10/74	2.24	2.25	0.06	0.08
Before 10/73	2.33	2.41	0.07	0.09
Prob. 6/72-10/73	2.30	2.41	0.07	0.09
Prob. before 6/72	2.41	2.42	0.12	0.16

Parenthood Status as of October 1976	Differences from Married Nonparents		Standard Errors	
	1973	1976	1973	1976
	FEMALES			
Nonparents	----	----	----	----
Parents	0.18	0.37	0.04	0.05
After 10/74	0.29	0.40	0.05	0.06
11/73-10/74	0.16	0.31	0.05	0.07
Before 10/73	0.12	0.37	0.05	0.07
Prob. 6/72-10/73	0.13	0.32	0.05	0.07
Prob. before 6/72	0.10	0.50	0.08	0.10
	MALES			
Nonparents	----	----	----	----
Parents	0.21	0.44	0.07	0.09
After 10/74	0.28	0.31	0.08	0.11
11/73-10/74	0.14	0.36	0.08	0.11
Before 10/73	0.23	0.52	0.09	0.11
Prob. 6/72-10/73	0.20	0.52	0.09	0.11
Prob. before 6/72	0.31	0.53	0.13	0.17

1973 and 1976 as a result of having become parents. However, this conclusion must be tempered by the observation that the control group here is a group of NLS participants who became married before October 1973 but who remained childless through October 1976. Having gone childless this long, their expectations of family sizes were reduced slightly between 1973 and 1976. It seems that, instead of parenthood causing expected family size to increase, the prolongation of childlessness has induced a scaling down of expected family sizes in the control group.

As was reported in Table 3.2, the average number of births expected by all female participants in the NLS was 2.25 in both 1973 and 1976. The fact that the overall average did not rise during this three-year period, even though some women already had three or more children at that time, indicates that the actual numbers of births through 1976 among women in the Class of 1972 were, for the most part, consistent with their long-range family plans.

NEAR-TERM PLANS IN 1976

Table 10.6 shows the percentage of NLS participants in each marital/parenthood category that expected to have a child within a year as of the third follow-up survey. This table reveals that, among the ever married respondents, the percentages of "expecting" couples were higher among the childless couples than among the parents. This provides further evidence that the early parents were not increasing their family sizes rapidly.

Table 10.7 shows, for each marital/parenthood category, the percentage of NLS respondents who reported on the third follow-up survey that they did not plan to have any more children. In those categories where the mean numbers of children were high in 1976, a sizable proportion of the participants did not expect to have any more children. While their plans may change and realities may conflict with plans, the pattern displayed here is consistent with the view that the NLS participants' fertility patterns are for the most part consistent with their long-term expectations.

A noteworthy observation from Table 10.7 is that a substantial percentage of the women who had no children in 1976 expected to remain childless. With 18.8 percent of the single nonmothers expecting to remain childless and 8.3 percent of the childless ever married women expecting to do so, altogether 9.2 percent of the women in the NLS expected to remain childless. Since the actual figure probably will prove to be lower, this figure is interesting because it is not much higher than the actual percentage of childless women of age 45 to 49 in the nation, which is 7.2 percent. Thus, although the women in the Class of 1972 expect to have much smaller families, on average, than their mothers did, only a small proportion of them expect to remain childless. Instead, the sharp drop in expected family sizes between generations results from a decline in the proportion of women who expect to have large families.

Table 10.6

Percentages of Respondents Expecting a Child in 1976 by Marital and Parenthood Status

Parenthood Status as of October 1976	Percentage	Sample Size
	SINGLE FEMALES	
Nonparents	2.2	2608
Parents	7.1	280
After 10/74	6.2	113
11/73-10/74	6.4	94
Before 10/73	9.6	73
Prob. 6/72-10/73	9.5	42
Prob. before 6/72	9.7	31
	EVER MARRIED FEMALES	
Nonparents	22.3	2382
Parents	19.0	2170
After 10/74	16.8	969
11/73-10/74	23.0	518
Before 10/73	19.1	598
Prob. 6/72-10/73	20.5	425
Prob. before 6/72	15.6	173
TIMING OF FIRST MARRIAGE:		
After 10/74		
Nonparents	18.5	1252
Parents	16.3	295
11/73 to 10/74		
Nonparents	27.7	517
Parents	18.4	445
6/72 to 10/73		
Nonparents	25.0	529
Parents	21.1	1130
Before 6/72		
Nonparents	28.2	71
Parents	14.9	295
	SINGLE MALES	
Nonparents	2.6	2752
Parents	7.9	140
After 10/74	12.7	79
11/73-10/74	2.1	48
Before 10/73	0.0	13
	EVER MARRIED MALES	
Nonparents	24.8	1647
Parents	21.3	1331
After 10/74	19.9	713
11/73-10/74	24.1	295
Before 10/73	23.3	253
Prob. 6/72-10/73	27.7	195
Prob. before 6/72	8.6	58
TIMING OF FIRST MARRIAGE:		
After 10/74		
Nonparents	21.3	1093
Parents	18.3	311
11/73 to 10/74		
Nonparents	31.5	333
Parents	24.4	369
6/72 to 10/73		
Nonparents	33.2	208
Parents	21.6	541
Before 6/72		
Nonparents	0.0	7
Parents	16.5	103

Table 10.7

Percentages of Respondents in 1976 Expecting No More Children by Marital and Parenthood Status

Parenthood Status as of October 1976	Percentage	Sample Size
	SINGLE FEMALES	
Nonparents	18.8	2608
Parents	36.8	280
After 10/74	32.7	113
11/73-10/74	36.2	94
Before 10/73	43.8	73
Prob. 6/72-10/73	33.3	42
Prob. before 6/72	58.1	31
	EVER MARRIED FEMALES	
Nonparents	8.3	2382
Parents	28.1	2170
After 10/74	14.6	969
11/73-10/74	32.4	518
Before 10/73	44.6	598
Prob. 6/72-10/73	43.3	425
Prob. before 6/72	48.0	173
TIMING OF FIRST MARRIAGE:		
After 10/74		
Nonparents	6.1	1252
Parents	15.3	295
11/73 to 10/74		
Nonparents	9.7	517
Parents	20.7	445
6/72 to 10/73		
Nonparents	11.7	529
Parents	30.2	1130
Before 6/72		
Nonparents	11.3	71
Parents	43.4	295
	SINGLE MALES	
Nonparents	21.3	2752
Parents	27.9	140
After 10/74	26.6	79
11/73-10/74	27.1	48
Before 10/73	38.5	13
	EVER MARRIED MALES	
Nonparents	8.4	1647
Parents	28.2	1331
After 10/74	17.1	713
11/73-10/74	38.3	295
Before 10/73	46.6	253
Prob. 6/72-10/73	39.0	195
Prob. before 6/72	72.4	58
TIMING OF FIRST MARRIAGE:		
After 10/74		
Nonparents	6.7	1093
Parents	16.7	311
11/73 to 10/74		
Nonparents	9.6	333
Parents	20.6	369
6/72 to 10/73		
Nonparents	15.9	208
Parents	34.9	541
Before 6/72		
Nonparents	14.3	7
Parents	56.3	103

XI. ATTITUDES

This section examines the effects of marriage and parenthood on outcomes that are less tangible than those examined previously. These outcomes are young people's views of themselves and the importance they place on disparate roles associated with work, family, and community. Marriage and parenthood can powerfully influence how young people allocate their energies, and how they view their goals and priorities. The process of family formation also introduces new bases for self-evaluation and provides young people with new sources of gratification and frustration. Some who had previously felt competent in dealing with academic, social, and parental demands may feel considerably less so in dealing with the new challenges of marriage and parenthood. For others, the reverse may be true. Either way, abrupt entry into a new stage of the life cycle makes self-evaluations especially vulnerable to change.

ATTITUDE OUTCOME MEASURES

The NLS data examined here measure four sets of attitudes, each of which relates to an aspect of identity: self-esteem; locus of control; orientations toward work, family, and community; and sex role attitudes. The NLS measures for these attitudinal variables are described below. Unless otherwise specified, the variables are measured on all four survey waves.

Self-Esteem

Self-esteem generally refers to a liking and respect for oneself. It may be the single most important aspect of the self-concept, representing as it does the evaluative integration of other, more specific components.

Whether or not it is the most important aspect, it is certainly the most frequently studied; references in the literature run in the thousands. Yet, serious problems still attend both the concept and its measurement. It has been variously defined and measured, with results that often conflict and confuse (Wylie, 1979). Until further progress is made in specifying exactly what the concept is and how best to measure it, this state of affairs is likely to continue. Owing to its obvious *potential* importance, however, the volume of research devoted to self-esteem is likely to continue—with an improvement, one hopes, in the quality of conceptualization and measurement.

Each wave of the NLS survey includes a shortened version of one of the more popular measures of generalized self-esteem, the Rosenberg self-esteem scale (Rosenberg, 1965). The NLS version enabled us to define the variable

ESTEEM in each year as the average coded response on a five-point scale to the following statements:

1. I take a positive attitude toward myself.
2. I feel I am a person of worth, on an equal plane with others.
3. I am able to do things as well as most people.
4. On the whole, I'm satisfied with myself.

Scoring: 1—"disagree strongly," ..., 5—"agree strongly."

Locus of Control

"Locus of control" refers to the extent to which individuals perceive contingency relationships between their actions and their outcomes. The originator of the concept (Rotter, 1966) distinguished between individuals who believe that at least some control resides within themselves ("internals") and those who believe that their outcomes are determined by agents or factors extrinsic to themselves ("externals"). De Charms (1968) has made a similar distinction between those who believe themselves to be "origins" and those who believe that they are "pawns."

The belief that one *can* or *cannot* control one's fate is obviously an important belief to hold about oneself; not surprisingly, locus of control has been found to be significantly related to several socially important variables. For example, "internals" are more likely to be campus office-holders and (among males at least) to achieve significantly higher college grades (Brown and Strickland, 1972). The latter relationship seems to hold for blacks as well as whites (Gurin, Gurin, Lao, and Beattie, 1969) and to be paralleled in higher aspirations among blacks who score high in internality. Becker and Hills (1979), examining unemployment among a national probability sample of teenagers, found locus of control as measured in 1966 to be a significant predictor of length of unemployment in 1975, with internals finding a new job more quickly than externals. Similarly, Andrisani and Nestel (1976), studying a national sample of middle-aged males, found that internality was associated with better job outcomes, even when other factors were controlled. This effect was apparent in both cross-sectional and longitudinal analyses.

These and other studies suggest the potential utility of this construct in explaining aspects of behavior that are important both to the individual and to society. To date, however, there has been little careful research aimed at disentangling possible antecedents and specifying long-term consequences. The advent of the NLS, which tracks locus of control among over 22,000 young people for several years, offers a major research opportunity.

Locus of control is measured on the NLS as the average coded response on a five-point scale to the following statements:

1. Good luck is more important than hard work.
2. Every time I try to get ahead, something or somebody stops me.

3. Planning only makes a person unhappy since plans hardly ever work out anyway.
4. People who accept their condition in life are happier than those who try to change things.

Scoring: 1—"agree strongly," . . ., 5—"disagree strongly."

Orientations Toward Work, Family, and Community

The roles that a person fills tend to become an important part of the person's identity (Gordon, 1976). Role identities are of many kinds: sexual identity, ethnic and religious identity, and identities associated with various acquired roles (e.g., occupational, political, and familial). Each role typically has a set of idealized norms to which the person tries to conform and against which the person measures himself or herself. Roles can shape both the content and evaluative meaning associated with the self-concept. Both of these effects may be especially prevalent during late adolescence and early adulthood, when the individual moves into a variety of new roles. Marriage and parenthood are especially likely to shift the person's goals, values, and bases for self-evaluation in accordance with new demands and expectations.

One way to elucidate the meaning of various role choices is to ask about a person's values regarding alternative roles. These values tend to be hierarchically organized; some roles are more important or salient to the individual than others (McCall and Simmons, 1978; Stryker, 1968). The NLS includes a set of questions about the relative importance the individual places on values surrounding career, family, and community. Specifically, the respondents were asked to rate the importance of:

A. Being successful in my line of work.
B. Finding the right person to marry and having a happy family life.
C. Having lots of money.
D. Having strong friendships.
E. Being able to find steady work.
F. Being a leader in my community.
G. Being able to give my children better opportunities than I've had.
H. Living close to parents and relatives.
I. Getting away from this area of the country.
J. Working to correct social and economic inequalities.

Scoring: 1—"Not important," 2—"Somewhat important," 3—"Very important."

The work orientation measure (WORK) is the average of the coded responses for items A, C, and E. Community orientation (COMM) uses the average for items F, G, and J. Family orientation (FAM) averages over B, H, and the negative of I. The response to item D, "Having strong friendships," did not correlate well with any of the factors and was not used in our analysis. Information on the factor structure of these scales is provided by the National Center for Education Statistics (1977).

Sex Role Attitudes

The 1976 NLS questionnaire contains a set of items measuring attitudes and beliefs concerning sex roles. The items measure two dimensions of sex role attitudes: traditional vs. nontraditional views of family and career priorities for women, and attitudes toward equality of opportunity in the labor market. Summary measures for these dimensions are created from coded responses to the following items:

A. A working mother of preschool children can be just as good a mother as the woman who doesn't work.
B. It is usually better for everyone involved if the man is the achiever outside the home and the woman takes care of the family.
C. Young men should be encouraged to take jobs that are usually filled by women (nursing, secretarial work, etc.).
D. Most women are just not interested in having big and important jobs.
E. Many qualified women can't get good jobs; men with the same skills have much less trouble.
F. Most women are happiest when they are making a home and caring for children.
G. High school counselors should urge young women to train for jobs which are now mainly held by men.
H. It is more important for a wife to help her husband than to have a career herself.
I. Schools teach women to want the less important jobs.
J. Men should be given the first chance at most jobs because they have the primary responsibility for providing for a family.

Scoring: 1—"Disagree strongly," ..., 4—"Agree strongly."

On the basis of a factor analysis described in App. F, two summary scales were derived. The first, labeled Measure A, measures the relative importance of family and work for women, and consists of the average score for items B, D, F, H, and J. High scores indicate agreement with the traditional priority of family over work. The second, labeled Measure B, measures attitudes toward equal opportunity in employment, and consists of the average score for items C, E, G and I. High scores on this factor indicate agreement with a nontraditional, equalitarian view of employment opportunities for men and women.[1] These factors roughly correspond to two clusters of items identified by Mason and Bumpass (1975)—one of which described traditional views regarding sex-based division of labor, the other equal rights in the labor market.

[1]Item A does not correlate well with either factor, and was therefore eliminated from scoring.

RESULTS

Self-Esteem

The mean values of the self-esteem measures for the four waves of the survey are provided in Table 11.1. Comparison of the means across columns reveals that young people in virtually every marital/parenthood category became more positive in their self-evaluations over the course of the four years, with the largest change generally occurring during the first year (1972-1973). Compared with this substantial change over time, differences between categories within any given year are typically quite small, which suggests that self-esteem is less affected by marriage and parenthood than by other developmental phenomena.[2]

Tables 11.2, 11.3, and 11.4 provide the adjusted means and intergroup differences for our individual effects analysis. The regression equations used in calculating the adjusted means are given in App. D. The set of independent variables is the same as that used in analyzing career aspirations.

The average effects of marriage and parenthood on self-esteem are quite small. The intergroup differences displayed in Tables 11.3 and 11.4 are nearly all less than 0.2 standard deviations in magnitude. Thus, the overall message from this analysis is that marriage and parenthood simply do not affect self-esteem in a strong and consistent way. Nevertheless, the tables do reveal evidence of small effects, detectable mostly because of the large sample sizes.

First, married males display consistently higher self-esteem than unmarried males (Table 11.1), and there is evidence of gains in self-esteem associated with marriage (Table 11.3). Parenthood, however, seems to exert a weaker, less consistent effect in the opposite direction, with fathers displaying slightly lower self-esteem than other married men (Table 11.4).

A similar pattern holds for females. Table 11.3 shows that the adjusted means for married women tend to be higher than for single women and there are gains in self-esteem around the time of marriage. From Table 11.4 we see that, among married women, early mothers display somewhat higher self-esteem in 1972 than nonmothers. This difference, however, narrows in later years, indicating some negative effects associated with parenthood.

The pattern of entries for single mothers (Table 11.3) is less consistent, perhaps owing to the relatively small sample sizes. The overall pattern is that women who became single mothers at any time during the four-year period started out (1972) slightly higher in self-esteem than other single women and ended up slightly lower (1976). The drop in self-esteem relative to the control group of single nonparents suggests that pregnancy and/or motherhood have negative effects on self-esteem for single women.

---

[2]Alternatively, it is possible that the changes over time reflect secular trends that are unrelated to individual development. The use of a single cohort does not permit us to distinguish between these explanations.

Table 11.1

Mean Values of the Self-Esteem Measures by Marital and Parenthood Status

Parenthood Status as of October 1976	Sample Means				Sample Sizes			
	1972	1973	1974	1976	1972	1973	1974	1976
SINGLE FEMALES								
Nonparents	3.90	4.09	4.16	4.24	3294	4091	4110	4234
Parents	3.97	4.06	4.06	4.12	285	396	403	409
After 10/74	3.96	4.08	4.09	4.14	108	154	150	163
11/73-10/74	3.94	4.07	4.00	4.02	105	132	142	138
Before 10/73	4.02	4.02	4.08	4.21	72	110	111	108
Prob. 6/72-10/73	4.29	4.05	4.05	4.20	32	65	66	64
Prob. before 6/72	3.81	3.98	4.13	4.23	40	45	45	44
EVER MARRIED FEMALES								
Nonparents	3.88	4.12	4.19	4.23	2113	2653	2652	2751
Parents	3.88	4.09	4.12	4.15	1873	2468	2431	2494
After 10/74	3.86	4.09	4.14	4.16	804	1036	1037	1088
11/73-10/74	3.85	4.12	4.15	4.15	476	651	621	603
Before 10/73	3.92	4.09	4.06	4.15	524	757	700	699
Prob. 6/72-10/73	3.90	4.09	4.05	4.14	341	530	491	495
Prob. before 6/72	3.97	4.08	4.08	4.17	183	227	209	204
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	3.90	4.11	4.19	4.26	1077	1330	1353	1378
Parents	3.89	4.05	4.16	4.18	240	330	328	343
11/73 to 10/74								
Nonparents	3.91	4.16	4.24	4.22	445	591	578	603
Parents	3.82	4.09	4.13	4.16	397	494	485	506
6/72 to 10/73								
Nonparents	3.81	4.10	4.17	4.21	516	630	629	671
Parents	3.91	4.11	4.12	4.14	989	1288	1271	1301
Before 6/72								
Nonparents	3.79	4.07	4.09	4.19	63	89	87	92
Parents	3.88	4.07	4.06	4.15	241	347	342	339
SINGLE MALES								
Nonparents	3.96	4.12	4.20	4.29	4325	5299	5323	5607
Parents	3.97	4.14	4.24	4.31	169	207	207	230
After 10/74	4.02	4.18	4.28	4.26	98	117	106	129
11/73-10/74	3.86	4.12	4.21	4.37	55	66	80	79
Before 10/73	4.05	4.00	4.13	4.34	16	24	21	22
EVER MARRIED MALES								
Nonparents	3.96	4.19	4.31	4.39	1545	1815	1846	1967
Parents	3.95	4.16	4.28	4.31	1187	1485	1445	1551
After 10/74	3.94	4.18	4.29	4.32	617	774	764	832
11/73-10/74	3.95	4.15	4.27	4.31	263	363	352	337
Before 10/73	3.92	4.14	4.28	4.31	232	326	280	297
Prob. 6/72-10/73	3.86	4.16	4.32	4.32	173	252	217	229
Prob. before 6/72	4.09	4.08	4.15	4.29	59	74	63	68
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	3.97	4.17	4.32	4.41	997	1169	1186	1259
Parents	3.99	4.16	4.30	4.34	284	338	344	377
11/73 to 10/74								
Nonparents	3.93	4.20	4.28	4.33	319	384	396	416
Parents	3.93	4.16	4.28	4.29	320	393	397	420
6/72 to 10/73								
Nonparents	3.99	4.26	4.33	4.36	211	242	251	276
Parents	3.92	4.18	4.30	4.32	488	630	590	628
Before 6/72								
Nonparents	4.01	4.32	4.32	4.61	8	10	10	9
Parents	4.00	4.10	4.14	4.28	88	120	108	122

Table 11.2

Adjusted Mean Values of the Self-Esteem Measures by Marital and Parenthood Status

Parenthood Status as of October 1976	Adjusted Means				Standard Errors			
	1972	1973	1974	1976	1972	1973	1974	1976
SINGLE FEMALES								
Nonparents	3.90	4.09	4.16	4.24	0.01	0.01	0.01	0.01
Parents	3.98	4.11	4.08	4.17	0.05	0.03	0.04	0.03
After 10/74	4.00	4.13	4.13	4.20	0.07	0.05	0.05	0.05
11/73-10/74	3.92	4.10	4.02	4.05	0.07	0.05	0.05	0.05
Before 10/73	4.04	4.07	4.11	4.27	0.08	0.06	0.06	0.06
Prob. 6/72-10/73	4.33	4.12	4.09	4.27	0.12	0.08	0.08	0.08
Prob. before 6/72	3.79	4.01	4.14	4.27	0.11	0.09	0.09	0.09
EVER MARRIED FEMALES								
Nonparents	3.92	4.15	4.23	4.27	0.02	0.01	0.01	0.01
Parents	3.96	4.16	4.18	4.23	0.02	0.01	0.02	0.01
After 10/74	3.94	4.14	4.19	4.23	0.03	0.02	0.02	0.02
11/73-10/74	3.95	4.19	4.22	4.24	0.03	0.02	0.03	0.03
Before 10/73	4.00	4.15	4.12	4.22	0.03	0.02	0.03	0.02
Prob. 6/72-10/73	3.98	4.15	4.11	4.22	0.04	0.03	0.03	0.03
Prob. before 6/72	4.04	4.15	4.14	4.25	0.05	0.04	0.04	0.04
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	3.93	4.12	4.21	4.28	0.02	0.02	0.02	0.02
Parents	3.95	4.11	4.20	4.23	0.04	0.03	0.03	0.03
11/73 to 10/74								
Nonparents	3.95	4.20	4.28	4.26	0.03	0.02	0.03	0.03
Parents	3.89	4.15	4.19	4.24	0.04	0.03	0.03	0.03
6/72 to 10/73								
Nonparents	3.87	4.15	4.22	4.27	0.03	0.02	0.03	0.02
Parents	4.00	4.18	4.18	4.22	0.02	0.02	0.02	0.02
Before 6/72								
Nonparents	3.85	4.14	4.16	4.28	0.09	0.06	0.07	0.06
Parents	3.96	4.14	4.13	4.24	0.05	0.03	0.04	0.03
SINGLE MALES								
Nonparents	3.96	4.12	4.20	4.29	0.01	0.01	0.01	0.01
Parents	3.94	4.13	4.21	4.32	0.05	0.04	0.04	0.04
After 10/74	4.00	4.17	4.25	4.28	0.06	0.05	0.06	0.05
11/73-10/74	3.82	4.09	4.17	4.38	0.09	0.07	0.07	0.07
Before 10/73	4.03	4.01	4.12	4.38	0.16	0.11	0.13	0.13
EVER MARRIED MALES								
Nonparents	3.98	4.21	4.33	4.41	0.02	0.01	0.01	0.01
Parents	3.98	4.19	4.30	4.35	0.02	0.02	0.02	0.02
After 10/74	3.97	4.21	4.31	4.36	0.03	0.02	0.02	0.02
11/73-10/74	3.98	4.18	4.28	4.35	0.04	0.03	0.03	0.03
Before 10/73	3.95	4.17	4.30	4.35	0.04	0.03	0.04	0.03
Prob. 6/72-10/73	3.89	4.19	4.33	4.36	0.05	0.04	0.04	0.04
Prob. before 6/72	4.13	4.12	4.18	4.34	0.08	0.07	0.07	0.07
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	3.98	4.19	4.33	4.42	0.02	0.02	0.02	0.02
Parents	4.00	4.17	4.30	4.37	0.04	0.03	0.03	0.03
11/73 to 10/74								
Nonparents	3.95	4.22	4.30	4.35	0.04	0.03	0.03	0.03
Parents	3.97	4.19	4.31	4.33	0.04	0.03	0.03	0.03
6/72 to 10/73								
Nonparents	4.03	4.29	4.36	4.40	0.04	0.04	0.04	0.04
Parents	3.95	4.22	4.32	4.36	0.03	0.02	0.03	0.02
Before 6/72								
Nonparents	4.07	4.36	4.35	4.65	0.22	0.18	0.19	0.20
Parents	4.05	4.15	4.17	4.33	0.07	0.05	0.06	0.05

Table 11.3

Intergroup Differences in Adjusted Means for the Self-Esteem Measures

Parenthood Status as of October 1976	Differences from Single nonparents				Standard Errors			
	1972	1973	1974	1976	1972	1973	1974	1976
SINGLE FEMALES								
Nonparents	----	----	----	----	----	----	----	----
Parents	0.08	0.01	-0.08	-0.07	0.05	0.04	0.04	0.04
After 10/74	0.10	0.04	-0.03	-0.04	0.07	0.05	0.05	0.05
11/73-10/74	0.02	0.01	-0.14	-0.19	0.07	0.05	0.06	0.06
Before 10/73	0.14	-0.02	-0.05	0.02	0.08	0.06	0.06	0.06
Prob. 6/72-10/73	0.43	0.03	-0.07	0.03	0.12	0.08	0.08	0.08
Prob. before 6/72	-0.11	-0.08	-0.02	0.03	0.11	0.09	0.09	0.09
EVER MARRIED FEMALES								
Nonparents	0.02	0.06	0.06	0.03	0.02	0.02	0.02	0.02
Parents	0.06	0.07	0.02	-0.01	0.02	0.02	0.02	0.02
After 10/74	0.04	0.05	0.03	-0.02	0.03	0.02	0.02	0.02
11/73-10/74	0.05	0.10	0.06	0.00	0.03	0.03	0.03	0.03
Before 10/73	0.10	0.06	-0.04	-0.02	0.03	0.02	0.03	0.03
Prob. 6/72-10/73	0.08	0.06	-0.05	-0.03	0.04	0.03	0.03	0.03
Prob. before 6/72	0.14	0.06	-0.02	0.00	0.05	0.04	0.04	0.04
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	0.03	0.03	0.05	0.04	0.02	0.02	0.02	0.02
Parents	0.05	0.02	0.04	0.00	0.05	0.03	0.04	0.03
11/73 to 10/74								
Nonparents	0.05	0.11	0.12	0.02	0.03	0.03	0.03	0.03
Parents	0.00	0.06	0.03	0.00	0.04	0.03	0.03	0.03
6/72 to 10/73								
Nonparents	-0.03	0.06	0.06	0.02	0.03	0.03	0.03	0.03
Parents	0.09	0.09	0.02	-0.02	0.03	0.02	0.02	0.02
Before 6/72								
Nonparents	-0.05	0.05	0.00	0.03	0.09	0.06	0.07	0.06
Parents	0.06	0.05	-0.03	0.00	0.05	0.03	0.04	0.04
SINGLE MALES								
Nonparents	----	----	----	----	----	----	----	----
Parents	-0.02	0.01	0.01	0.03	0.05	0.04	0.04	0.04
After 10/74	0.04	0.05	0.05	-0.01	0.07	0.05	0.06	0.05
11/73-10/74	-0.14	-0.03	-0.03	0.09	0.09	0.07	0.07	0.07
Before 10/73	0.08	-0.11	-0.08	0.09	0.16	0.12	0.13	0.13
EVER MARRIED MALES								
Nonparents	0.02	0.09	0.13	0.11	0.02	0.02	0.02	0.02
Parents	0.02	0.07	0.10	0.06	0.02	0.02	0.02	0.02
After 10/74	0.01	0.09	0.11	0.07	0.03	0.02	0.02	0.02
11/73-10/74	0.02	0.06	0.08	0.06	0.04	0.03	0.03	0.03
Before 10/73	0.00	0.05	0.10	0.06	0.04	0.03	0.04	0.04
Prob. 6/72-10/73	-0.07	0.07	0.13	0.07	0.05	0.04	0.04	0.04
Prob. before 6/72	0.17	0.00	-0.02	0.05	0.08	0.07	0.08	0.07
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	0.02	0.07	0.13	0.13	0.02	0.02	0.02	0.02
Parents	0.04	0.05	0.10	0.08	0.04	0.03	0.03	0.03
11/73 to 10/74								
Nonparents	0.00	0.10	0.10	0.06	0.04	0.03	0.03	0.03
Parents	0.01	0.07	0.10	0.04	0.04	0.03	0.03	0.03
6/72 to 10/73								
Nonparents	0.07	0.17	0.16	0.11	0.04	0.04	0.04	0.04
Parents	0.00	0.10	0.12	0.07	0.03	0.02	0.03	0.03
Before 6/72								
Nonparents	0.11	0.24	0.15	0.36	0.22	0.18	0.19	0.20
Parents	0.09	0.03	-0.03	0.04	0.07	0.05	0.06	0.05

Table 11.4

Results of the Analysis of the Self-Esteem Measures for NLS Respondents Who Were Married as of October 1973

Parenthood Status as of October 1976	Sample Means 1972	1973	1974	1976	Sample Sizes 1972	1973	1974	1976
			FEMALES					
Nonparents	3.81	4.10	4.16	4.20	579	719	716	763
Parents	3.90	4.10	4.11	4.14	1230	1635	1613	1640
After 10/74	3.90	4.10	4.12	4.13	353	452	466	483
11/73-10/74	3.85	4.13	4.15	4.14	354	494	453	446
Before 10/73	3.93	4.09	4.07	4.15	464	675	623	622
Prob. 6/72-10/73	3.91	4.09	4.05	4.14	304	474	436	442
Prob. before 6/72	3.96	4.07	4.10	4.17	160	201	187	180
			MALES					
Nonparents	3.99	4.26	4.33	4.37	219	252	261	285
Parents	3.93	4.17	4.27	4.31	576	750	698	750
After 10/74	3.89	4.26	4.29	4.35	137	190	182	197
11/73-10/74	3.92	4.16	4.28	4.31	163	241	212	211
Before 10/73	3.92	4.13	4.26	4.30	220	306	259	277
Prob. 6/72-10/73	3.87	4.16	4.31	4.30	164	235	199	212
Prob. before 6/72	4.06	4.05	4.12	4.32	56	71	60	65

Parenthood Status as of October 1976	Adjusted Means 1972	1973	1974	1976	Standard Errors 1972	1973	1974	1976
			FEMALES					
Nonparents	3.81	4.10	4.16	4.20	0.03	0.02	0.02	0.02
Parents	3.92	4.12	4.12	4.16	0.03	0.02	0.02	0.02
After 10/74	3.91	4.10	4.12	4.14	0.04	0.02	0.03	0.03
11/73-10/74	3.89	4.16	4.18	4.17	0.04	0.02	0.03	0.03
Before 10/73	3.95	4.10	4.09	4.16	0.04	0.02	0.03	0.03
Prob. 6/72-10/73	3.93	4.11	4.08	4.16	0.04	0.03	0.03	0.03
Prob. before 6/72	3.98	4.08	4.11	4.17	0.06	0.04	0.05	0.05
			MALES					
Nonparents	3.99	4.26	4.33	4.37	0.04	0.03	0.03	0.03
Parents	3.94	4.17	4.26	4.30	0.03	0.03	0.03	0.02
After 10/74	3.91	4.25	4.29	4.33	0.05	0.04	0.04	0.04
11/73-10/74	3.92	4.15	4.26	4.29	0.05	0.04	0.04	0.04
Before 10/73	3.93	4.15	4.24	4.28	0.05	0.04	0.04	0.04
Prob. 6/72-10/73	3.88	4.16	4.29	4.27	0.06	0.04	0.04	0.04
Prob. before 6/72	4.08	4.09	4.10	4.33	0.09	0.07	0.07	0.07

Parenthood Status as of October 1976	Differences from Married Nonparents 1972	1973	1974	1976	Standard Errors 1972	1973	1974	1976
			FEMALES					
Nonparents	----	----	----	----	----	----	----	----
Parents	0.12	0.02	-0.03	-0.05	0.04	0.02	0.03	0.03
After 10/74	0.10	0.01	-0.03	-0.06	0.05	0.03	0.03	0.04
11/73-10/74	0.08	0.06	0.02	-0.04	0.05	0.03	0.03	0.04
Before 10/73	0.14	0.00	-0.07	-0.04	0.05	0.03	0.03	0.04
Prob. 6/72-10/73	0.12	0.01	-0.08	-0.05	0.05	0.03	0.04	0.04
Prob. before 6/72	0.17	-0.02	-0.04	-0.04	0.07	0.04	0.05	0.06
			MALES					
Nonparents	----	----	----	----	----	----	----	----
Parents	-0.04	-0.09	-0.07	-0.07	0.05	0.04	0.04	0.04
After 10/74	-0.07	-0.01	-0.04	-0.04	0.07	0.05	0.05	0.05
11/73-10/74	-0.06	-0.11	-0.07	-0.08	0.07	0.05	0.05	0.05
Before 10/73	-0.05	-0.11	-0.08	-0.09	0.07	0.05	0.05	0.05
Prob. 6/72-10/73	-0.11	-0.10	-0.04	-0.10	0.07	0.05	0.05	0.05
Prob. before 6/72	0.09	-0.17	-0.22	-0.04	0.10	0.08	0.08	0.07

One other conclusion is suggested by the data on single mothers: The data do *not* support an "esteem deficit" interpretation of the motives for out-of-wedlock pregnancy. If women choose to have children out of wedlock in order to make up for a negative self-image, one would expect to see evidence of that process in these data. That is, one would expect that women who eventually became single mothers would have had lower self-esteem than other single women *before* they became mothers. They did not, however. Thus, although *some* kind of self-selection process may well be operating, these data indicate that it does not involve low self-esteem.

The analysis of covariance results for the change in self-esteem between 1972 and 1976 are reported in Table 11.5. Overall, the regression equation explains less than two percent of the variance in changes in self-esteem for these years. Thus, all effects noted in the table are quite small relative to the standard error. The covariance analysis corroborates the finding from the individual effects analysis that, on average, there is a positive effect of marriage on self-esteem among males, but not among females. The covariance analysis also reveals some negative effects of parenthood (both early and recent) on women's self-esteem. Reference to Table 11.4 indicates that these effects result from a lessening of the initially *higher* self-esteem among women who became mothers during the four-year period. Thus, although there is a significant decline in self-esteem associated with parenthood, that decline did not lead to a significant deficit among mothers in 1976.

Locus of Control

Table 11.6 displays mean values for the locus of control measure across the four survey waves. Since the overall means of the locus of control measures increased over the four-year period, it appears that, on average, the NLS respondents gained a somewhat greater sense of control over their lives.

Comparison of the means within the first column (1972) also reveals that there were large initial differences in locus of control between parents and nonparents, with the latter being more internal. Inspection of the corresponding adjusted means in Table 11.7 shows that for men and ever married women, most (but not all) of these initial differences disappear when preexisting differences in background factors are taken into account; however, there remains a substantial initial deficit in locus of control for single mothers.

Tables 11.8 and 11.9 provide the intergroup comparisons that result from our individual effects analysis for each of the two control groups. The entries at the top of Table 11.8 show the aforementioned single-mother deficit rather strikingly. Even after background factors are controlled, those who became single mothers at any time during the four-year period displayed greater externality throughout, with the size of this adjusted difference being about 0.3 standard deviations (compared with about 0.9 standard deviations before adjustment). Because the deficit appears to be at least as strong before parenthood as afterward, the data for single mothers do not suggest that single parenthood

Table 11.5

Regression Results for the Change in Self-Esteem Between 1972 and 1976

Variable	Females b	Females t	Males b	Males t
Constant	0.335	3.6	0.094	1.1
Race/ethnicity				
Black	-0.083	-2.9	-0.024	-0.8
Hispanic	0.014	0.3	0.027	0.6
Indian	0.103	1.2	-0.062	-0.8
Oriental	0.265	3.2	-0.042	-0.6
Other minority	-0.092	-1.6	-0.075	-1.4
Region				
Northeast	-0.003	-0.1	-0.037	-1.5
South	-0.091	-4.0	-0.069	-3.1
West	-0.072	-2.6	-0.069	-2.6
High school measures				
Ability	0.0005	1.1	0.0015	4.0
Percentile rank in class	-0.0021	-5.1	-0.0021	-5.2
Academic program	0.004	0.2	-0.039	-1.8
Vocational-technical program	-0.013	-0.6	-0.007	-0.3
Family background				
Father's education	-0.0027	-0.6	0.0044	1.0
Mother's education	0.0075	1.3	0.0049	0.9
Father's occupation (SEI)	0.0007	1.5	0.0002	0.5
Mother's professional status	-0.034	-1.1	0.013	0.4
Postsecondary track (1972)				
4-year student	0.002	0.1	-0.060	-2.3
2-year student	-0.020	-0.7	-0.004	-0.1
Vocational-technical student	-0.010	-0.3	-0.021	-0.5
Military	-0.026	-0.1	0.026	0.6
Homemaker	-0.091	-2.2		
Unemployed	0.024	0.7	0.037	1.0
Marital status (1976)				
Months since first marriage	0.0010	1.2	-0.0006	-0.6
Married	0.002	0.1	0.098	3.2
Divorced, widowed, or separated	0.024	0.5	0.067	1.1
Expecting to be married	0.033	1.1	0.036	1.2
Parenthood				
Parent by October 1973	-0.088	-2.1	-0.023	-0.4
Parent Nov. 1973 to Oct. 1974	-0.105	-2.8	-0.029	-0.6
Parent Nov. 1974 to Oct. 1976	-0.073	-2.5	-0.041	-1.3
Expecting parenthood, 1976	0.016	0.4	-0.037	-0.9
Two or more children, 1976	0.026	0.7	0.028	0.6
R^2	0.017		0.016	
S	0.721		0.697	
F	4.2		3.7	
N	7350		6981	

Table 11.6

Mean Values of the Locus of Control Measures by Marital and Parenthood Status

Parenthood Status as of October 1976	Sample Means				Sample Sizes			
	1972	1973	1974	1976	1972	1973	1974	1976
SINGLE FEMALES								
Nonparents	3.89	3.92	3.92	3.97	3293	4089	4107	4234
Parents	3.33	3.42	3.35	3.40	286	395	402	409
After 10/74	3.41	3.47	3.40	3.43	108	153	149	163
11/73-10/74	3.30	3.36	3.28	3.36	105	132	142	138
Before 10/73	3.25	3.41	3.40	3.42	73	110	111	108
Prob. 6/72-10/73	3.08	3.38	3.44	3.39	32	65	66	64
Prob. before 6/72	3.39	3.46	3.34	3.46	41	45	45	44
EVER MARRIED FEMALES								
Nonparents	3.85	3.95	3.95	3.99	2112	2656	2648	2751
Parents	3.68	3.75	3.76	3.80	1871	2464	2427	2490
After 10/74	3.73	3.81	3.83	3.85	804	1035	1035	1088
11/73-10/74	3.65	3.78	3.74	3.81	475	649	621	599
Before 10/73	3.63	3.67	3.67	3.73	523	756	699	698
Prob. 6/72-10/73	3.65	3.69	3.67	3.75	340	529	491	495
Prob. before 6/72	3.60	3.60	3.66	3.69	183	227	208	203
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	3.90	3.96	3.95	4.02	1077	1332	1350	1378
Parents	3.71	3.72	3.76	3.81	240	329	328	343
11/73 to 10/74								
Nonparents	3.83	3.93	3.98	3.97	446	591	578	603
Parents	3.61	3.72	3.70	3.78	396	493	484	506
6/72 to 10/73								
Nonparents	3.81	3.95	3.94	3.95	514	631	628	671
Parents	3.71	3.79	3.78	3.82	987	1287	1270	1296
Before 6/72								
Nonparents	3.60	3.88	3.87	3.98	63	89	87	92
Parents	3.69	3.72	3.74	3.76	242	347	341	339
SINGLE MALES								
Nonparents	3.73	3.82	3.82	3.89	4324	5291	5313	5602
Parents	3.46	3.45	3.44	3.47	167	207	207	230
After 10/74	3.49	3.48	3.48	3.51	96	117	106	129
11/73-10/74	3.41	3.50	3.44	3.49	55	66	80	79
Before 10/73	3.39	3.16	3.26	3.20	16	24	21	22
EVER MARRIED MALES								
Nonparents	3.68	3.85	3.86	3.95	1543	1815	1845	1967
Parents	3.46	3.66	3.65	3.71	1182	1482	1442	1551
After 10/74	3.52	3.70	3.70	3.72	615	773	763	832
11/73-10/74	3.44	3.64	3.57	3.66	264	361	350	337
Before 10/73	3.37	3.61	3.61	3.75	230	326	280	297
Prob. 6/72-10/73	3.37	3.62	3.68	3.78	173	252	217	229
Prob. before 6/72	3.38	3.58	3.37	3.64	57	74	63	68
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	3.70	3.86	3.87	3.96	995	1170	1185	1259
Parents	3.41	3.60	3.62	3.63	283	337	343	377
11/73 to 10/74								
Nonparents	3.68	3.88	3.88	3.99	319	384	396	418
Parents	3.51	3.66	3.63	3.71	318	393	397	420
6/72 to 10/73								
Nonparents	3.60	3.75	3.78	3.84	211	241	251	276
Parents	3.48	3.71	3.68	3.76	487	628	588	628
Before 6/72								
Nonparents	3.84	3.82	3.97	4.17	8	10	10	9
Parents	3.35	3.60	3.62	3.72	87	120	108	122

Table 11.7

Adjusted Mean Values of the Locus of Control Measures by Marital and Parenthood Status

Parenthood Status as of October 1976	Adjusted Means				Standard Errors			
	1972	1973	1974	1976	1972	1973	1974	1976
SINGLE FEMALES								
Nonparents	3.89	3.92	3.92	3.97	0.01	0.01	0.01	0.01
Parents	3.66	3.74	3.66	3.73	0.04	0.03	0.04	0.04
After 10/74	3.75	3.78	3.70	3.75	0.06	0.05	0.05	0.05
11/73-10/74	3.60	3.67	3.56	3.67	0.07	0.06	0.06	0.06
Before 10/73	3.64	3.79	3.76	3.79	0.08	0.06	0.06	0.06
Prob. 6/72-10/73	3.51	3.78	3.83	3.79	0.11	0.08	0.08	0.08
Prob. before 6/72	3.73	3.83	3.68	3.82	0.10	0.09	0.10	0.10
EVER MARRIED FEMALES								
Nonparents	3.91	3.97	3.98	4.02	0.02	0.01	0.01	0.01
Parents	3.88	3.90	3.90	3.95	0.02	0.01	0.02	0.02
After 10/74	3.88	3.91	3.93	3.95	0.02	0.02	0.02	0.02
11/73-10/74	3.89	3.95	3.92	3.99	0.03	0.03	0.03	0.03
Before 10/73	3.86	3.85	3.85	3.91	0.03	0.02	0.03	0.03
Prob. 6/72-10/73	3.85	3.85	3.83	3.91	0.04	0.03	0.03	0.03
Prob. before 6/72	3.86	3.83	3.89	3.92	0.05	0.04	0.04	0.05
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	3.92	3.96	3.95	4.02	0.02	0.02	0.02	0.02
Parents	3.89	3.85	3.90	3.94	0.04	0.03	0.04	0.03
11/73 to 10/74								
Nonparents	3.89	3.96	4.02	4.00	0.03	0.03	0.03	0.03
Parents	3.80	3.87	3.86	3.93	0.03	0.03	0.03	0.03
6/72 to 10/73								
Nonparents	3.92	4.01	4.01	4.03	0.03	0.03	0.03	0.03
Parents	3.90	3.92	3.92	3.96	0.02	0.02	0.02	0.02
Before 6/72								
Nonparents	3.77	3.99	3.99	4.12	0.08	0.07	0.07	0.07
Parents	3.91	3.89	3.90	3.93	0.04	0.03	0.04	0.04
SINGLE MALES								
Nonparents	3.73	3.82	3.82	3.89	0.01	0.01	0.01	0.01
Parents	3.69	3.65	3.68	3.73	0.05	0.05	0.05	0.05
After 10/74	3.73	3.69	3.72	3.77	0.07	0.06	0.07	0.06
11/73-10/74	3.61	3.68	3.65	3.72	0.09	0.08	0.08	0.08
Before 10/73	3.67	3.40	3.54	3.51	0.16	0.13	0.15	0.14
EVER MARRIED MALES								
Nonparents	3.75	3.90	3.90	3.99	0.02	0.01	0.02	0.02
Parents	3.68	3.81	3.81	3.88	0.02	0.02	0.02	0.02
After 10/74	3.71	3.83	3.83	3.86	0.03	0.02	0.03	0.02
11/73-10/74	3.67	3.81	3.75	3.85	0.04	0.03	0.04	0.04
Before 10/73	3.63	3.80	3.81	3.96	0.04	0.04	0.04	0.04
Prob. 6/72-10/73	3.60	3.79	3.86	3.97	0.05	0.04	0.05	0.04
Prob. before 6/72	3.69	3.80	3.61	3.90	0.09	0.07	0.08	0.08
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	3.75	3.89	3.90	3.99	0.02	0.02	0.02	0.02
Parents	3.61	3.75	3.78	3.79	0.04	0.03	0.04	0.03
11/73 to 10/74								
Nonparents	3.76	3.93	3.93	4.03	0.04	0.03	0.03	0.03
Parents	3.72	3.81	3.78	3.87	0.04	0.03	0.03	0.03
6/72 to 10/73								
Nonparents	3.77	3.86	3.89	3.96	0.05	0.04	0.04	0.04
Parents	3.69	3.85	3.84	3.92	0.03	0.03	0.03	0.03
Before 6/72								
Nonparents	3.90	3.85	4.00	4.19	0.23	0.19	0.21	0.22
Parents	3.65	3.82	3.84	3.95	0.07	0.06	0.06	0.06

Table 11.8

Intergroup Differences in Adjusted Means for the Locus of Control Measures

Parenthood Status as of October 1976	Differences from Single nonparents				Standard Errors			
	1972	1973	1974	1976	1972	1973	1974	1976
SINGLE FEMALES								
Nonparents	----	----	----	----	----	----	----	----
Parents	-0.22	-0.17	-0.26	-0.23	0.04	0.04	0.04	0.04
After 10/74	-0.14	-0.14	-0.23	-0.22	0.06	0.05	0.05	0.05
11/73-10/74	-0.29	-0.25	-0.36	-0.30	0.07	0.06	0.06	0.06
Before 10/73	-0.25	-0.12	-0.16	-0.18	0.08	0.06	0.06	0.06
Prob. 6/72-10/73	-0.37	-0.13	-0.09	-0.17	0.11	0.08	0.08	0.08
Prob. before 6/72	-0.15	-0.09	-0.24	-0.15	0.10	0.09	0.10	0.10
EVER MARRIED FEMALES								
Nonparents	0.02	0.06	0.06	0.05	0.02	0.02	0.02	0.02
Parents	0.00	-0.02	-0.02	-0.02	0.02	0.02	0.02	0.02
After 10/74	0.00	0.00	0.01	-0.01	0.03	0.02	0.02	0.02
11/73-10/74	0.00	0.04	0.00	0.02	0.03	0.03	0.03	0.03
Before 10/73	-0.03	-0.07	-0.07	-0.05	0.03	0.03	0.03	0.03
Prob. 6/72-10/73	-0.03	-0.07	-0.09	-0.06	0.04	0.03	0.03	0.03
Prob. before 6/72	-0.02	-0.09	-0.03	-0.05	0.05	0.04	0.05	0.05
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	0.03	0.04	0.03	0.05	0.02	0.02	0.02	0.02
Parents	0.00	-0.06	-0.02	-0.03	0.04	0.04	0.04	0.04
11/73 to 10/74								
Nonparents	0.01	0.05	0.10	0.04	0.03	0.03	0.03	0.03
Parents	-0.08	-0.05	-0.06	-0.04	0.03	0.03	0.03	0.03
6/72 to 10/73								
Nonparents	0.03	0.10	0.09	0.06	0.03	0.03	0.03	0.03
Parents	0.02	0.01	0.00	0.00	0.02	0.02	0.02	0.02
Before 6/72								
Nonparents	-0.12	0.07	0.07	0.15	0.08	0.07	0.07	0.07
Parents	0.03	-0.03	-0.02	-0.03	0.04	0.04	0.04	0.04
SINGLE MALES								
Nonparents	----	----	----	----	----	----	----	----
Parents	-0.04	-0.17	-0.14	-0.16	0.05	0.05	0.05	0.05
After 10/74	0.01	-0.13	-0.10	-0.12	0.07	0.06	0.07	0.06
11/73-10/74	-0.12	-0.14	-0.17	-0.17	0.09	0.08	0.08	0.08
Before 10/73	-0.05	-0.42	-0.28	-0.39	0.16	0.13	0.15	0.14
EVER MARRIED MALES								
Nonparents	0.03	0.07	0.08	0.10	0.02	0.02	0.02	0.02
Parents	-0.05	0.00	-0.01	-0.02	0.02	0.02	0.02	0.02
After 10/74	-0.02	0.00	0.01	-0.04	0.03	0.02	0.03	0.03
11/73-10/74	-0.06	-0.02	-0.07	-0.05	0.04	0.03	0.04	0.04
Before 10/73	-0.10	-0.03	-0.02	0.06	0.05	0.04	0.04	0.04
Prob. 6/72-10/73	-0.12	-0.03	0.04	0.08	0.05	0.04	0.05	0.05
Prob. before 6/72	-0.03	-0.02	-0.21	0.00	0.09	0.07	0.08	0.08
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	0.02	0.07	0.08	0.09	0.02	0.02	0.02	0.02
Parents	-0.11	-0.07	-0.04	-0.10	0.04	0.04	0.04	0.04
11/73 to 10/74								
Nonparents	0.03	0.11	0.10	0.14	0.04	0.03	0.03	0.03
Parents	0.00	-0.01	-0.04	-0.03	0.04	0.03	0.04	0.03
6/72 to 10/73								
Nonparents	0.04	0.04	0.07	0.06	0.05	0.04	0.04	0.04
Parents	-0.03	0.03	0.02	0.03	0.03	0.03	0.03	0.03
Before 6/72								
Nonparents	0.17	0.03	0.18	0.29	0.23	0.19	0.21	0.22
Parents	-0.07	0.00	0.02	0.05	0.07	0.06	0.07	0.06

Table 11.9

Results of the Analysis of the Locus of Control Measures for NLS Respondents Who Were Married as of October 1973

Parenthood Status as of October 1976	Sample Means				Sample Sizes			
	1972	1973	1974	1976	1972	1973	1974	1976
FEMALES								
Nonparents	3.78	3.94	3.93	3.96	577	720	715	763
Parents	3.71	3.78	3.77	3.81	1229	1634	1611	1635
After 10/74	3.81	3.84	3.84	3.87	353	453	465	483
11/73-10/74	3.67	3.83	3.81	3.85	353	492	453	442
Before 10/73	3.65	3.70	3.70	3.75	464	675	622	621
Prob. 6/72-10/73	3.67	3.74	3.71	3.76	303	474	436	442
Prob. before 6/72	3.62	3.62	3.68	3.72	161	201	186	179
MALES								
Nonparents	3.61	3.76	3.79	3.85	219	251	261	285
Parents	3.46	3.69	3.67	3.75	574	748	696	750
After 10/74	3.52	3.78	3.75	3.77	137	190	182	197
11/73-10/74	3.53	3.72	3.67	3.73	164	239	210	211
Before 10/73	3.39	3.62	3.62	3.76	219	306	259	277
Prob. 6/72-10/73	3.40	3.63	3.70	3.79	164	235	199	212
Prob. before 6/72	3.35	3.58	3.38	3.66	55	71	60	65

Parenthood Status as of October 1976	Adjusted Means				Standard Errors			
	1972	1973	1974	1976	1972	1973	1974	1976
FEMALES								
Nonparents	3.78	3.94	3.93	3.96	0.03	0.02	0.02	0.02
Parents	3.79	3.86	3.85	3.89	0.02	0.02	0.02	0.02
After 10/74	3.83	3.86	3.85	3.87	0.04	0.03	0.03	0.03
11/73-10/74	3.79	3.94	3.92	3.95	0.04	0.03	0.03	0.03
Before 10/73	3.76	3.82	3.81	3.86	0.04	0.03	0.03	0.03
Prob. 6/72-10/73	3.76	3.82	3.80	3.85	0.04	0.03	0.04	0.03
Prob. before 6/72	3.77	3.78	3.82	3.87	0.06	0.05	0.06	0.06
MALES								
Nonparents	3.61	3.76	3.79	3.85	0.05	0.04	0.04	0.04
Parents	3.51	3.78	3.73	3.84	0.04	0.04	0.03	0.03
After 10/74	3.57	3.84	3.81	3.81	0.06	0.05	0.05	0.05
11/73-10/74	3.54	3.76	3.69	3.79	0.06	0.05	0.05	0.05
Before 10/73	3.45	3.75	3.70	3.89	0.06	0.05	0.05	0.05
Prob. 6/72-10/73	3.43	3.74	3.77	3.91	0.06	0.06	0.06	0.06
Prob. before 6/72	3.50	3.76	3.50	3.84	0.10	0.10	0.10	0.09

Parenthood Status as of October 1976	Differences from Married Nonparents				Standard Errors			
	1972	1973	1974	1976	1972	1973	1974	1976
FEMALES								
Nonparents	----	----	----	----	----	----	----	----
Parents	0.01	-0.08	-0.08	-0.07	0.04	0.03	0.03	0.03
After 10/74	0.04	-0.08	-0.08	-0.08	0.05	0.04	0.04	0.04
11/73-10/74	0.01	0.00	-0.01	0.00	0.05	0.04	0.04	0.04
Before 10/73	-0.02	-0.12	-0.13	-0.10	0.05	0.04	0.04	0.04
Prob. 6/72-10/73	-0.03	-0.12	-0.14	-0.11	0.05	0.04	0.04	0.04
Prob. before 6/72	-0.02	-0.15	-0.11	-0.09	0.07	0.05	0.06	0.06
MALES								
Nonparents	----	----	----	----	----	----	----	----
Parents	-0.10	0.02	-0.05	0.00	0.06	0.06	0.05	0.05
After 10/74	-0.04	0.08	0.02	-0.04	0.08	0.07	0.07	0.06
11/73-10/74	-0.07	0.00	-0.09	-0.07	0.07	0.07	0.07	0.06
Before 10/73	-0.16	0.00	-0.08	0.04	0.08	0.07	0.07	0.07
Prob. 6/72-10/73	-0.18	-0.02	-0.02	0.05	0.08	0.07	0.07	0.07
Prob. before 6/72	-0.11	0.00	-0.29	-0.01	0.11	0.11	0.11	0.10

causes the observed deficit in locus of control. If anything, the data are more consistent with the converse interpretation—that locus of control may play a causal role in the events that lead to unwed pregnancy. This interpretation would be consistent with other data showing that locus of control is related to the practice of contraception (MacDonald, 1970).

The data in Table 11.8 suggest that marriage by itself has only a slight positive effect on locus of control for both sexes. When one compares married with single nonparents, the former (particularly married men) display a slightly greater sense of control over their lives than the latter, and the gap widens over the four-year period. This does not hold true for married parents, however. Essentially, the data present a picture in which neither marriage nor parenthood within marriage has more than a negligible effect on young people's sense of personal control over their lives. Even among single mothers, who do exhibit a clearly reduced sense of personal control, the data suggest that this reduced sense was probably present before the onset of parenthood.

Table 11.10, which provides analysis of covariance results pertaining to the change in locus of control over the four-year period, reveals a significant positive effect of marriage on locus of control among men but not among women. Further, it reveals a significant *positive* effect of early parenthood among men. This latter effect, however, must be interpreted in the light of the intergroup differences displayed in the preceding tables. The positive effect on changes in locus of control among men who became early parents represents recovery from an earlier deficit, rather than a true positive effect of parenthood. Interestingly, the corresponding regression coefficient for women is negative, indicating that for them there was no such recovery.

Table 11.10 reveals one other significant parenthood effect that is worth noting. For men, there is a negative coefficient associated with having two or more children in 1976. An obvious interpretation of this effect is that having a number of dependents constrains men's perceptions of the range of options that are open to them, and hence the amount of personal control they can exercise.

Orientation Toward Work, Community, and Family

In this section, we present results for a set of attitude items concerning the relative values placed on work, community, and family concerns. The NLS data indicate that work and family orientations are strongly affected by marriage and parenthood, in ways that conform to intuition. Community orientation, on the other hand, seems only weakly related to these family formation variables, and the marginal effects that do appear are not easily interpreted. Accordingly, we shall have more to say about work and family orientations than about community orientation.

Table 11.11 presents the mean values for the work orientation measures over the four years covered by the NLS survey. The table reveals a steady decline in the means over the four years. The table also reveals substantial sex

Table 11.10

Regression Results for the Change in Locus of Control Between 1972 and 1976

Variable	Females b	Females t	Males b	Males t
Constant	0.516	5.5	0.378	3.7
Race/ethnicity				
Black	-0.096	-3.3	-0.135	-3.8
Hispanic	0.020	0.4	-0.047	-0.9
Indian	0.149	1.7	-0.099	-1.1
Oriental	0.049	0.6	0.024	0.3
Other minority	0.095	1.7	-0.028	-0.4
Region				
Northeast	-0.039	-1.5	-0.040	-1.4
South	-0.031	-1.4	-0.014	-0.5
West	-0.017	-0.6	0.015	0.5
High school measures				
Ability	-0.0007	-1.7	-0.0014	-3.2
Percentile rank in class	-0.0022	-5.2	-0.0008	-1.7
Academic program	-0.018	-0.8	-0.001	-0.0
Vocational-technical program	-0.016	-0.7	0.032	1.2
Family background				
Father's education	0.0027	0.6	0.0065	1.3
Mother's education	-0.0129	-2.2	0.0117	1.8
Father's occupation (SEI)	0.0011	2.4	-0.0007	-1.3
Mother's professional status	0.004	0.1	-0.094	-2.7
Postsecondary track (1972)				
4-year student	-0.027	-1.0	-0.088	-2.9
2-year student	-0.019	-0.6	-0.086	-2.7
Vocational-technical student	-0.008	-0.3	-0.073	-1.6
Military	-0.191	-1.1	-0.032	-0.7
Homemaker	-0.007	-0.2		
Unemployed	0.040	1.2	-0.020	-0.4
Marital status (1976)				
Months since first marriage	0.0007	0.9	-0.0010	-0.8
Married	0.026	0.9	0.107	3.1
Divorced, widowed, or separated	-0.026	-0.5	-0.084	-1.2
Expecting to be married	0.016	0.5	0.004	0.1
Parenthood				
Parent by October 1973	-0.052	-1.2	0.205	2.9
Parent Nov. 1973 to Oct. 1974	-0.039	-1.0	0.017	0.3
Parent Nov. 1974 to Oct. 1976	-0.057	-1.9	-0.059	-1.6
Expecting parenthood, 1976	-0.027	-0.7	0.068	1.5
Two or more children, 1976	-0.054	-1.4	-0.211	-3.9
R^2	0.019		0.022	
S	0.732		0.806	
F	4.7		5.1	
N	7346		6970	

Table 11.11

Mean Values of the Work Orientation Measures by Marital and Parenthood Status

Parenthood Status as of October 1976	Sample Means				Sample Sizes			
	1972	1973	1974	1976	1972	1973	1974	1976
SINGLE FEMALES								
Nonparents	2.45	2.40	2.39	2.42	3297	4101	4103	4236
Parents	2.61	2.54	2.54	2.49	288	396	396	410
After 10/74	2.61	2.53	2.50	2.46	109	154	148	162
11/73-10/74	2.62	2.57	2.57	2.52	106	132	142	139
Before 10/73	2.60	2.52	2.54	2.49	73	110	106	109
Prob. 6/72-10/73	2.67	2.53	2.52	2.52	32	65	62	65
Prob. before 6/72	2.54	2.51	2.57	2.44	41	45	44	44
EVER MARRIED FEMALES								
Nonparents	2.46	2.35	2.36	2.31	2110	2656	2643	2752
Parents	2.45	2.29	2.29	2.24	1872	2474	2420	2504
After 10/74	2.46	2.31	2.29	2.20	803	1045	1032	1091
11/73-10/74	2.47	2.27	2.29	2.26	475	650	617	605
Before 10/73	2.44	2.26	2.30	2.27	525	755	699	704
Prob. 6/72-10/73	2.40	2.25	2.29	2.25	342	529	491	497
Prob. before 6/72	2.49	2.30	2.31	2.35	183	226	208	207
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	2.45	2.37	2.36	2.30	1077	1331	1348	1381
Parents	2.44	2.39	2.37	2.25	239	330	326	342
11/73 to 10/74								
Nonparents	2.48	2.37	2.37	2.32	444	591	581	603
Parents	2.47	2.32	2.27	2.22	397	497	484	508
6/72 to 10/73								
Nonparents	2.46	2.31	2.36	2.31	514	631	623	669
Parents	2.45	2.24	2.27	2.22	989	1291	1265	1304
Before 6/72								
Nonparents	2.40	2.33	2.40	2.31	63	90	87	92
Parents	2.43	2.29	2.30	2.30	241	347	340	345
SINGLE MALES								
Nonparents	2.57	2.49	2.47	2.50	4329	5308	5304	5609
Parents	2.61	2.59	2.61	2.60	168	207	207	230
After 10/74	2.63	2.59	2.59	2.56	97	117	106	129
11/73-10/74	2.54	2.55	2.61	2.60	55	66	80	78
Before 10/73	2.73	2.70	2.67	2.78	16	24	21	23
EVER MARRIED MALES								
Nonparents	2.61	2.52	2.52	2.55	1548	1823	1836	1970
Parents	2.61	2.56	2.58	2.56	1188	1487	1443	1559
After 10/74	2.61	2.56	2.57	2.56	617	775	763	837
11/73-10/74	2.63	2.58	2.59	2.58	264	362	350	340
Before 10/73	2.59	2.55	2.59	2.54	233	328	279	297
Prob. 6/72-10/73	2.59	2.55	2.59	2.53	174	253	216	229
Prob. before 6/72	2.61	2.54	2.59	2.58	59	75	63	68
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	2.60	2.52	2.49	2.55	1000	1176	1183	1261
Parents	2.63	2.58	2.59	2.60	284	339	345	378
11/73 to 10/74								
Nonparents	2.61	2.53	2.55	2.53	319	385	390	417
Parents	2.61	2.56	2.57	2.54	319	392	393	424
6/72 to 10/73								
Nonparents	2.63	2.56	2.56	2.57	212	242	250	277
Parents	2.60	2.55	2.57	2.55	491	631	591	631
Before 6/72								
Nonparents	2.71	2.53	2.67	2.57	8	10	10	10
Parents	2.60	2.54	2.58	2.60	87	121	108	122

differences throughout the four years of the survey, with the men (unsurprisingly) placing higher importance on work than women do. Tables 11.12, 11.13, and 11.14 present the results of our individual effects analysis for the work orientation measure. The latter two tables, which summarize the average effects of marriage and parenthood, show that there are substantial differences in these effects by sex. For women, both marriage and subsequent parenthood seem to depress the relative importance that they place on work. For men, the effects of marriage and parenthood are not apparent. Interestingly, single women display a pattern that is similar to men's; parenthood does not reduce the importance they place on work. We suspect that this latter finding, like the sex difference that appears among married respondents, reflects economic realities. Those who are sole or primary providers for their dependents do not have the option of leaving the paid labor force to become full-time homemakers. The objective importance of work in their lives is therefore reflected in subjective ratings as well.

The sex differences noted above also appear in the results of our covariance analysis of changes in work orientation, summarized in Table 11.15. Both marriage and parenthood have highly significant negative effects for women, but not for men. In addition, the covariance analysis reveals significant negative effects, again among women only, for *expected* marriage or parenthood in 1976. Because earlier expectations are not controlled, these effects may be partly due to selection phenomena, but they also suggest that some women may undergo shifts in their attitudes toward work in anticipation of increased family responsibilities.

Tables 11.16 to 11.19 present the results of our individual effects analysis for community orientation. The analysis fails to disclose any noteworthy effects and suggests that this variable is largely unaffected by marriage or parenthood. The covariance analysis (Table 11.20) indicates that marriage positively affects men's community orientation, but that this effect dissipates over time. It also indicates that marriage has a significant negative effect on women's orientations toward community. Neither of these marriage effects, however, is at all large. The positive effect for men amounts to only 0.1 standard deviations, and the negative effect for women is only slightly larger. Because these effects were small, and because neither effect appears with any consistency in the individual effects analysis, we are disinclined to attach any importance to them.

Table 11.21 presents the means for the family orientation measure, and Tables 11.22, 11.23, and 11.24 summarize the results of our individual effects analysis for this measure. The entries in Tables 11.23 and 11.24 disclose some significant effects due to marriage and parenthood. Respondents who were ever married became more family-oriented over the four years compared with their single counterparts (Table 11.23). The relative gain is greatest among women, but also appears among married men, at least among those who are nonparents. The pattern of intergroup differences displays two features that support a causal interpretation of a marriage effect. First, initial intergroup differences are fairly small, and widen over time. Second, the largest relative increases tend to occur around the time of the marriage.

Table 11.12

Adjusted Mean Values of the Work Orientation Measures by Marital and Parenthood Status

Parenthood Status as of October 1976	Adjusted Means				Standard Errors			
	1972	1973	1974	1976	1972	1973	1974	1976
SINGLE FEMALES								
Nonparents	2.45	2.40	2.39	2.42	0.01	0.01	0.01	0.01
Parents	2.48	2.41	2.40	2.40	0.02	0.02	0.02	0.02
After 10/74	2.48	2.42	2.37	2.39	0.03	0.03	0.03	0.03
11/73-10/74	2.49	2.44	2.44	2.43	0.04	0.03	0.03	0.03
Before 10/73	2.45	2.37	2.38	2.39	0.04	0.04	0.04	0.04
Prob. 6/72-10/73	2.51	2.38	2.35	2.42	0.06	0.05	0.05	0.05
Prob. before 6/72	2.40	2.36	2.41	2.34	0.06	0.05	0.06	0.06
EVER MARRIED FEMALES								
Nonparents	2.44	2.35	2.36	2.31	0.01	0.01	0.01	0.01
Parents	2.39	2.25	2.24	2.22	0.01	0.01	0.01	0.01
After 10/74	2.41	2.29	2.26	2.20	0.01	0.01	0.01	0.01
11/73-10/74	2.40	2.22	2.23	2.24	0.02	0.02	0.02	0.02
Before 10/73	2.36	2.21	2.23	2.25	0.02	0.01	0.02	0.01
Prob. 6/72-10/73	2.34	2.20	2.24	2.23	0.02	0.02	0.02	0.02
Prob. before 6/72	2.39	2.22	2.22	2.30	0.03	0.02	0.03	0.03
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	2.45	2.38	2.36	2.30	0.01	0.01	0.01	0.01
Parents	2.39	2.36	2.33	2.23	0.02	0.02	0.02	0.02
11/73 to 10/74								
Nonparents	2.46	2.37	2.37	2.33	0.02	0.02	0.02	0.02
Parents	2.41	2.28	2.22	2.20	0.02	0.02	0.02	0.02
6/72 to 10/73								
Nonparents	2.42	2.31	2.34	2.31	0.02	0.02	0.02	0.01
Parents	2.40	2.21	2.23	2.21	0.01	0.01	0.01	0.01
Before 6/72								
Nonparents	2.32	2.30	2.35	2.30	0.04	0.04	0.04	0.04
Parents	2.34	2.23	2.24	2.27	0.02	0.02	0.02	0.02
SINGLE MALES								
Nonparents	2.57	2.49	2.47	2.50	0.01	0.01	0.01	0.00
Parents	2.54	2.50	2.49	2.50	0.03	0.03	0.03	0.03
After 10/74	2.56	2.50	2.48	2.47	0.04	0.04	0.04	0.03
11/73-10/74	2.47	2.46	2.50	2.51	0.05	0.05	0.04	0.04
Before 10/73	2.66	2.59	2.53	2.68	0.09	0.08	0.08	0.08
EVER MARRIED MALES								
Nonparents	2.59	2.51	2.49	2.53	0.01	0.01	0.01	0.01
Parents	2.57	2.51	2.50	2.51	0.01	0.01	0.01	0.01
After 10/74	2.57	2.51	2.51	2.52	0.02	0.01	0.01	0.01
11/73-10/74	2.58	2.52	2.51	2.53	0.02	0.02	0.02	0.02
Before 10/73	2.54	2.49	2.50	2.48	0.02	0.02	0.02	0.02
Prob. 6/72-10/73	2.54	2.50	2.51	2.47	0.03	0.02	0.03	0.02
Prob. before 6/72	2.55	2.47	2.48	2.51	0.05	0.04	0.05	0.04
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	2.59	2.51	2.48	2.54	0.01	0.01	0.01	0.01
Parents	2.59	2.52	2.52	2.54	0.02	0.02	0.02	0.02
11/73 to 10/74								
Nonparents	2.59	2.52	2.52	2.52	0.02	0.02	0.02	0.02
Parents	2.57	2.51	2.50	2.49	0.02	0.02	0.02	0.02
6/72 to 10/73								
Nonparents	2.60	2.52	2.50	2.53	0.03	0.02	0.02	0.02
Parents	2.56	2.51	2.50	2.50	0.02	0.02	0.02	0.02
Before 6/72								
Nonparents	2.68	2.53	2.63	2.56	0.13	0.12	0.12	0.11
Parents	2.54	2.47	2.48	2.53	0.04	0.03	0.04	0.03

Table 11.13

Intergroup Differences in Adjusted Means for the Work Orientation Measures

Parenthood Status as of October 1976	Differences from Single nonparents 1972	1973	1974	1976	Standard Errors 1972	1973	1974	1976
SINGLE FEMALES								
Nonparents	----	----	----	----	----	----	----	----
Parents	0.03	0.02	0.01	-0.02	0.02	0.02	0.02	0.02
After 10/74	0.03	0.02	-0.02	-0.04	0.04	0.03	0.03	0.03
11/73-10/74	0.04	0.04	0.05	0.01	0.04	0.03	0.03	0.03
Before 10/73	0.00	-0.02	-0.01	-0.03	0.04	0.04	0.04	0.04
Prob. 6/72-10/73	0.06	-0.02	-0.04	0.00	0.06	0.05	0.05	0.05
Prob. before 6/72	-0.05	-0.03	0.02	-0.08	0.06	0.05	0.06	0.06
EVER MARRIED FEMALES								
Nonparents	-0.01	-0.04	-0.03	-0.11	0.01	0.01	0.01	0.01
Parents	-0.06	-0.15	-0.15	-0.20	0.01	0.01	0.01	0.01
After 10/74	-0.04	-0.11	-0.13	-0.23	0.01	0.01	0.01	0.01
11/73-10/74	-0.05	-0.17	-0.16	-0.18	0.02	0.02	0.02	0.02
Before 10/73	-0.09	-0.19	-0.16	-0.18	0.02	0.02	0.02	0.02
Prob. 6/72-10/73	-0.11	-0.19	-0.15	-0.20	0.02	0.02	0.02	0.02
Prob. before 6/72	-0.06	-0.17	-0.17	-0.12	0.03	0.03	0.03	0.03
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	0.00	-0.02	-0.03	-0.12	0.01	0.01	0.01	0.01
Parents	-0.06	-0.04	-0.06	-0.20	0.02	0.02	0.02	0.02
11/73 to 10/74								
Nonparents	0.01	-0.03	-0.02	-0.10	0.02	0.02	0.02	0.02
Parents	-0.04	-0.11	-0.17	-0.22	0.02	0.02	0.02	0.02
6/72 to 10/73								
Nonparents	-0.03	-0.09	-0.05	-0.11	0.02	0.02	0.02	0.02
Parents	-0.05	-0.19	-0.16	-0.21	0.01	0.01	0.01	0.01
Before 6/72								
Nonparents	-0.13	-0.10	-0.04	-0.13	0.04	0.04	0.04	0.04
Parents	-0.11	-0.17	-0.15	-0.15	0.02	0.02	0.02	0.02
SINGLE MALES								
Nonparents	----	----	----	----	----	----	----	----
Parents	-0.03	0.01	0.02	0.01	0.03	0.03	0.03	0.03
After 10/74	-0.01	0.01	0.01	-0.03	0.04	0.04	0.04	0.03
11/73-10/74	-0.10	-0.03	0.03	0.01	0.05	0.05	0.04	0.04
Before 10/73	0.09	0.11	0.06	0.19	0.09	0.08	0.08	0.08
EVER MARRIED MALES								
Nonparents	0.02	0.03	0.02	0.04	0.01	0.01	0.01	0.01
Parents	0.00	0.02	0.03	0.02	0.01	0.01	0.01	0.01
After 10/74	0.00	0.03	0.04	0.03	0.02	0.01	0.02	0.01
11/73-10/74	0.01	0.04	0.04	0.03	0.02	0.02	0.02	0.02
Before 10/73	-0.03	0.00	0.03	-0.01	0.03	0.02	0.02	0.02
Prob. 6/72-10/73	-0.03	0.01	0.04	-0.02	0.03	0.02	0.03	0.02
Prob. before 6/72	-0.02	-0.02	0.02	0.01	0.05	0.04	0.05	0.04
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	0.02	0.02	0.01	0.04	0.01	0.01	0.01	0.01
Parents	0.02	0.04	0.05	0.05	0.02	0.02	0.02	0.02
11/73 to 10/74								
Nonparents	0.03	0.03	0.06	0.03	0.02	0.02	0.02	0.02
Parents	0.00	0.03	0.03	0.00	0.02	0.02	0.02	0.02
6/72 to 10/73								
Nonparents	0.03	0.04	0.03	0.04	0.03	0.02	0.02	0.02
Parents	0.00	0.02	0.03	0.01	0.02	0.02	0.02	0.02
Before 6/72								
Nonparents	0.11	0.05	0.16	0.07	0.13	0.12	0.12	0.11
Parents	-0.03	-0.01	0.01	0.04	0.04	0.03	0.04	0.03

Table 11.14

Results of the Analysis of the Work Orientation Measures for NLS Respondents Who Were Married as of October 1973

Parenthood Status as of October 1976	Sample Means				Sample Sizes			
	1972	1973	1974	1976	1972	1973	1974	1976
FEMALES								
Nonparents	2.46	2.31	2.36	2.31	577	721	710	761
Parents	2.45	2.25	2.28	2.24	1230	1638	1605	1649
After 10/74	2.47	2.27	2.28	2.23	353	457	464	486
11/73-10/74	2.46	2.24	2.26	2.24	353	493	450	447
Before 10/73	2.43	2.25	2.29	2.26	465	674	620	627
Prob. 6/72-10/73	2.39	2.23	2.28	2.23	305	474	435	444
Prob. before 6/72	2.49	2.30	2.31	2.34	160	200	185	183
MALES								
Nonparents	2.64	2.56	2.56	2.57	220	252	260	287
Parents	2.60	2.55	2.57	2.56	578	752	699	753
After 10/74	2.60	2.56	2.56	2.56	137	192	182	199
11/73-10/74	2.64	2.56	2.58	2.59	165	240	212	212
Before 10/73	2.58	2.54	2.59	2.54	221	307	258	277
Prob. 6/72-10/73	2.58	2.54	2.59	2.52	165	235	198	212
Prob. before 6/72	2.60	2.53	2.59	2.59	56	72	60	65

Parenthood Status as of October 1976	Adjusted Means				Standard Errors			
	1972	1973	1974	1976	1972	1973	1974	1976
FEMALES								
Nonparents	2.46	2.31	2.36	2.31	0.01	0.01	0.01	0.01
Parents	2.43	2.24	2.25	2.23	0.01	0.01	0.01	0.01
After 10/74	2.46	2.27	2.27	2.23	0.02	0.02	0.02	0.02
11/73-10/74	2.44	2.23	2.23	2.24	0.02	0.02	0.02	0.02
Before 10/73	2.39	2.22	2.25	2.23	0.02	0.02	0.02	0.02
Prob. 6/72-10/73	2.37	2.21	2.25	2.21	0.02	0.02	0.02	0.02
Prob. before 6/72	2.43	2.24	2.24	2.28	0.03	0.03	0.03	0.04
MALES								
Nonparents	2.64	2.56	2.56	2.57	0.02	0.02	0.02	0.02
Parents	2.61	2.57	2.56	2.56	0.02	0.02	0.02	0.02
After 10/74	2.59	2.57	2.56	2.56	0.03	0.02	0.02	0.02
11/73-10/74	2.64	2.59	2.57	2.59	0.03	0.02	0.02	0.02
Before 10/73	2.60	2.56	2.58	2.54	0.03	0.03	0.03	0.02
Prob. 6/72-10/73	2.59	2.57	2.58	2.52	0.03	0.03	0.03	0.03
Prob. before 6/72	2.62	2.55	2.58	2.58	0.05	0.04	0.05	0.04

Parenthood Status as of October 1976	Differences from Married Nonparents				Standard Errors			
	1972	1973	1974	1976	1972	1973	1974	1976
FEMALES								
Nonparents	----	----	----	----	----	----	----	----
Parents	-0.03	-0.08	-0.11	-0.08	0.02	0.02	0.02	0.02
After 10/74	0.01	-0.05	-0.09	-0.08	0.02	0.02	0.02	0.02
11/73-10/74	-0.02	-0.08	-0.13	-0 07	0.02	0.02	0.02	0.03
Before 10/73	-0.06	-0.10	-0.11	-0.08	0.02	0.02	0.02	0.03
Prob. 6/72-10/73	-0.08	-0.10	-0.11	-0.10	0.03	0.03	0.03	0.03
Prob. before 6/72	-0.03	-0.07	-0.12	-0.03	0.04	0.04	0.04	0.04
MALES								
Nonparents	----	----	----	----	----	----	----	----
Parents	-0.03	0.01	0.00	0.00	0.03	0.03	0.03	0.02
After 10/74	-0.04	0.01	0.00	0.00	0.04	0.03	0.03	0.03
11/73-10/74	0.00	0.03	0.01	0.02	0.04	0.03	0.03	0.03
Before 10/73	-0.04	0.01	0.02	-0.03	0.04	0.03	0.03	0.03
Prob. 6/72-10/73	-0.04	0.01	0.02	-0.04	0.04	0.03	0.03	0.03
Prob. before 6/72	-0.02	0.00	0.02	0.01	0.05	0.05	0.05	0.05

Table 11.15

Regression Results for the Change in Work Orientation Between 1972 and 1976

Variable	Females b	Females t	Males b	Males t
Constant	-0.371	-6.3	-0.181	-3.4
Race/ethnicity				
Black	0.059	3.3	0.030	1.6
Hispanic	0.079	2.8	0.071	2.7
Indian	-0.049	-0.9	0.094	2.0
Oriental	0.031	0.6	0.068	1.5
Other minority	0.061	1.7	0.083	2.6
Region				
Northeast	-0.006	-0.4	0.050	3.3
South	0.010	0.7	0.026	1.9
West	0.002	0.1	-0.005	-0.3
High school measures				
Ability	0.0010	4.1	0.0002	1.1
Percentile rank in class	-0.0007	-2.6	-0.0004	-1.5
Academic program	0.011	0.7	-0.002	-0.1
Vocational-technical program	-0.011	-0.8	-0.024	-1.7
Family background				
Father's education	0.0055	2.0	0.0042	1.6
Mother's education	0.0042	1.2	-0.0007	-0.2
Father's occupation (SEI)	0.0005	1.8	-0.0000	-0.0
Mother's professional status	-0.012	-0.6	0.008	0.4
Mother's homemaker status	-0.004	-0.3	-0.001	-0.1
Postsecondary track (1972)				
4-year student	0.048	2.8	-0.000	-0.0
2-year student	0.023	1.2	-0.026	-1.6
Vocational-technical student	0.021	1.0	0.034	1.4
Military	0.161	1.4	0.030	1.2
Homemaker	0.021	0.8		
Unemployed	-0.027	-1.3	0.057	2.5
Marital status (1976)				
Months since first marriage	0.0008	1.6	0.0001	0.2
Married	-0.133	-7.2	0.013	0.7
Divorced, widowed, or separated	-0.003	-0.1	0.032	0.9
Expecting to be married	-0.063	-3.3	0.015	0.9
Parenthood				
Parent by October 1973	-0.043	-1.6	-0.009	-0.2
Parent Nov. 1973 to Oct. 1974	-0.092	-4.0	0.033	1.1
Parent Nov. 1974 to Oct. 1976	-0.099	-5.4	0.021	1.1
Expecting parenthood, 1976	-0.121	-5.1	-0.007	-0.3
Two or more children, 1976	0.012	0.5	0.003	0.1
R^2	0.060		0.009	
S	0.450		0.420	
F	14.7		2.0	
N	7364		6996	

Table 11.16

Mean Values of the Community Orientation Measures by Marital and Parenthood Status

Parenthood Status as of October 1976	Sample Means 1972	1973	1974	1976	Sample Sizes 1972	1973	1974	1976
SINGLE FEMALES								
Nonparents	2.12	2.01	1.98	1.94	3293	4095	4100	4235
Parents	2.30	2.24	2.17	2.16	288	394	396	410
After 10/74	2.28	2.24	2.13	2.11	110	152	148	162
11/73-10/74	2.29	2.18	2.18	2.20	106	132	142	139
Before 10/73	2.34	2.29	2.21	2.20	72	110	106	109
Prob. 6/72-10/73	2.40	2.34	2.22	2.19	32	65	62	65
Prob. before 6/72	2.29	2.23	2.19	2.20	40	45	44	44
EVER MARRIED FEMALES								
Nonparents	2.13	2.00	1.97	1.90	2110	2653	2640	2751
Parents	2.17	2.08	2.03	2.01	1870	2471	2420	2504
After 10/74	2.15	2.06	2.00	1.97	803	1041	1032	1090
11/73-10/74	2.18	2.08	2.06	2.02	475	650	617	606
Before 10/73	2.18	2.11	2.05	2.05	523	756	699	704
Prob. 6/72-10/73	2.14	2.11	2.03	2.03	340	530	491	497
Prob. before 6/72	2.25	2.13	2.09	2.11	183	226	208	207
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	2.12	1.99	1.95	1.89	1077	1328	1346	1381
Parents	2.17	2.10	2.02	2.01	239	330	326	342
11/73 to 10/74								
Nonparents	2.14	1.99	1.99	1.90	444	590	581	603
Parents	2.18	2.08	2.03	1.99	397	495	484	507
6/72 to 10/73								
Nonparents	2.14	2.03	2.00	1.92	514	632	622	668
Parents	2.16	2.06	2.02	1.99	987	1289	1265	1305
Before 6/72								
Nonparents	2.23	2.09	1.98	1.92	63	90	87	92
Parents	2.19	2.13	2.07	2.09	241	348	340	345
SINGLE MALES								
Nonparents	2.10	2.02	2.00	1.98	4318	5295	5299	5604
Parents	2.31	2.23	2.20	2.19	170	206	207	230
After 10/74	2.30	2.21	2.15	2.16	98	117	106	129
11/73-10/74	2.31	2.23	2.22	2.17	56	65	80	78
Before 10/73	2.42	2.33	2.40	2.35	16	24	21	23
EVER MARRIED MALES								
Nonparents	2.15	2.08	2.03	2.01	1548	1822	1835	1969
Parents	2.21	2.16	2.11	2.09	1182	1485	1439	1558
After 10/74	2.17	2.14	2.11	2.07	614	774	759	837
11/73-10/74	2.28	2.18	2.12	2.09	265	362	350	339
Before 10/73	2.23	2.18	2.12	2.12	230	327	279	297
Prob. 6/72-10/73	2.21	2.17	2.10	2.10	173	252	216	229
Prob. before 6/72	2.29	2.21	2.20	2.19	57	75	63	68
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	2.13	2.07	2.03	2.01	999	1175	1182	1260
Parents	2.20	2.18	2.12	2.11	284	338	342	378
11/73 to 10/74								
Nonparents	2.18	2.09	2.04	2.00	319	384	390	417
Parents	2.20	2.18	2.15	2.08	317	392	393	424
6/72 to 10/73								
Nonparents	2.20	2.14	2.00	2.01	212	243	250	277
Parents	2.21	2.13	2.09	2.08	487	630	590	630
Before 6/72								
Nonparents	2.12	2.33	2.23	2.10	8	10	10	10
Parents	2.28	2.19	2.07	2.08	87	121	108	122

Table 11.17

Adjusted Mean Values of the Community Orientation Measures by Marital and Parenthood Status

Parenthood Status as of October 1976	Adjusted Means				Standard Errors			
	1972	1973	1974	1976	1972	1973	1974	1976
SINGLE FEMALES								
Nonparents	2.12	2.01	1.98	1.94	0.01	0.01	0.01	0.01
Parents	2.14	2.03	1.97	1.95	0.03	0.02	0.02	0.02
After 10/74	2.14	2.06	1.95	1.92	0.04	0.04	0.04	0.04
11/73-10/74	2.12	1.97	1.98	1.99	0.04	0.04	0.04	0.04
Before 10/73	2.15	2.05	1.97	1.96	0.05	0.04	0.04	0.04
Prob. 6/72-10/73	2.21	2.09	1.97	1.94	0.08	0.05	0.06	0.06
Prob. before 6/72	2.11	1.99	1.96	1.97	0.07	0.06	0.07	0.07
EVER MARRIED FEMALES								
Nonparents	2.14	2.01	1.97	1.91	0.01	0.01	0.01	0.01
Parents	2.14	2.03	1.98	1.95	0.01	0.01	0.01	0.01
After 10/74	2.14	2.03	1.97	1.94	0.02	0.01	0.01	0.01
11/73-10/74	2.14	2.01	2.00	1.96	0.02	0.02	0.02	0.02
Before 10/73	2.13	2.03	1.97	1.97	0.02	0.02	0.02	0.02
Prob. 6/72-10/73	2.10	2.04	1.98	1.96	0.02	0.02	0.02	0.02
Prob. before 6/72	2.17	2.01	1.97	1.99	0.03	0.03	0.03	0.03
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	2.14	2.00	1.96	1.90	0.01	0.01	0.01	0.01
Parents	2.14	2.04	1.96	1.95	0.03	0.02	0.02	0.02
11/73 to 10/74								
Nonparents	2.15	2.00	1.99	1.91	0.02	0.02	0.02	0.02
Parents	2.15	2.02	1.97	1.93	0.02	0.02	0.02	0.02
6/72 to 10/73								
Nonparents	2.14	2.02	1.99	1.91	0.02	0.02	0.02	0.02
Parents	2.13	2.02	1.98	1.94	0.02	0.01	0.01	0.01
Before 6/72								
Nonparents	2.20	2.04	1.94	1.88	0.06	0.04	0.05	0.05
Parents	2.13	2.05	1.99	2.02	0.03	0.02	0.02	0.02
SINGLE MALES								
Nonparents	2.10	2.02	2.00	1.98	0.01	0.01	0.01	0.01
Parents	2.15	2.01	1.98	1.93	0.04	0.03	0.03	0.03
After 10/74	2.14	2.00	1.93	1.91	0.05	0.04	0.05	0.04
11/73-10/74	2.14	2.01	1.99	1.91	0.06	0.06	0.05	0.05
Before 10/73	2.24	2.09	2.14	2.08	0.12	0.09	0.10	0.10
EVER MARRIED MALES								
Nonparents	2.13	2.07	2.01	2.00	0.01	0.01	0.01	0.01
Parents	2.15	2.07	2.02	2.00	0.01	0.01	0.01	0.01
After 10/74	2.11	2.08	2.03	2.01	0.02	0.02	0.02	0.02
11/73-10/74	2.20	2.08	2.01	1.99	0.03	0.02	0.02	0.03
Before 10/73	2.15	2.07	2.00	2.01	0.03	0.03	0.03	0.03
Prob. 6/72-10/73	2.13	2.06	1.99	1.99	0.04	0.03	0.03	0.03
Prob. before 6/72	2.19	2.08	2.05	2.06	0.06	0.05	0.06	0.06
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	2.12	2.06	2.02	2.01	0.01	0.01	0.01	0.01
Parents	2.12	2.08	2.01	2.00	0.03	0.02	0.03	0.02
11/73 to 10/74								
Nonparents	2.17	2.07	2.02	1.99	0.03	0.02	0.02	0.02
Parents	2.14	2.11	2.06	2.01	0.03	0.02	0.02	0.02
6/72 to 10/73								
Nonparents	2.16	2.09	1.94	1.98	0.03	0.03	0.03	0.03
Parents	2.15	2.05	2.01	2.01	0.02	0.02	0.02	0.02
Before 6/72								
Nonparents	2.10	2.32	2.21	2.12	0.16	0.14	0.14	0.15
Parents	2.19	2.08	1.94	1.97	0.05	0.04	0.04	0.04

Table 11.18

Intergroup Differences in Adjusted Means for the Community Orientation Measures

Parenthood Status as of October 1976	Differences from Single nonparents 1972	1973	1974	1976	Standard Errors 1972	1973	1974	1976
SINGLE FEMALES								
Nonparents	----	----	----	----	----	----	----	----
Parents	0.02	0.01	0.00	0.01	0.03	0.02	0.03	0.03
After 10/74	0.02	0.04	-0.02	-0.02	0.04	0.04	0.04	0.04
11/73-10/74	0.00	-0.04	0.01	0.05	0.04	0.04	0.04	0.04
Before 10/73	0.03	0.04	0.00	0.02	0.05	0.04	0.04	0.04
Prob. 6/72-10/73	0.09	0.08	0.00	0.00	0.08	0.05	0.06	0.06
Prob. before 6/72	-0.01	-0.02	-0.01	0.03	0.07	0.06	0.07	0.07
EVER MARRIED FEMALES								
Nonparents	0.02	0.00	0.00	-0.03	0.01	0.01	0.01	0.01
Parents	0.02	0.01	0.00	0.01	0.01	0.01	0.01	0.01
After 10/74	0.02	0.02	0.00	0.00	0.02	0.02	0.02	0.02
11/73-10/74	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02
Before 10/73	0.01	0.02	0.00	0.03	0.02	0.02	0.02	0.02
Prob. 6/72-10/73	-0.02	0.03	0.00	0.02	0.03	0.02	0.02	0.02
Prob. before 6/72	0.05	0.00	0.00	0.04	0.03	0.03	0.03	0.03
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	0.02	-0.01	-0.02	-0.04	0.02	0.01	0.01	0.01
Parents	0.02	0.03	-0.01	0.01	0.03	0.02	0.02	0.02
11/73 to 10/74								
Nonparents	0.03	-0.02	0.01	-0.03	0.02	0.02	0.02	0.02
Parents	0.03	0.01	0.00	-0.01	0.02	0.02	0.02	0.02
6/72 to 10/73								
Nonparents	0.02	0.01	0.01	-0.03	0.02	0.02	0.02	0.02
Parents	0.01	0.01	0.00	0.00	0.02	0.01	0.01	0.01
Before 6/72								
Nonparents	0.08	0.03	-0.04	-0.06	0.06	0.05	0.05	0.05
Parents	0.01	0.04	0.01	0.08	0.03	0.02	0.03	0.03
SINGLE MALES								
Nonparents	----	----	----	----	----	----	----	----
Parents	0.05	0.00	-0.02	-0.05	0.04	0.03	0.03	0.03
After 10/74	0.04	-0.02	-0.07	-0.07	0.05	0.04	0.05	0.04
11/73-10/74	0.04	-0.02	0.00	-0.07	0.06	0.06	0.05	0.05
Before 10/73	0.14	0.07	0.15	0.10	0.12	0.09	0.10	0.10
EVER MARRIED MALES								
Nonparents	0.03	0.04	0.01	0.02	0.01	0.01	0.01	0.01
Parents	0.04	0.05	0.02	0.02	0.02	0.01	0.01	0.01
After 10/74	0.01	0.05	0.04	0.03	0.02	0.02	0.02	0.02
11/73-10/74	0.10	0.06	0.01	0.01	0.03	0.02	0.03	0.03
Before 10/73	0.05	0.04	0.00	0.03	0.03	0.03	0.03	0.03
Prob. 6/72-10/73	0.03	0.04	-0.01	0.01	0.04	0.03	0.03	0.03
Prob. before 6/72	0.09	0.05	0.06	0.08	0.06	0.05	0.06	0.06
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	0.02	0.04	0.02	0.03	0.02	0.01	0.01	0.01
Parents	0.02	0.06	0.02	0.03	0.03	0.03	0.03	0.02
11/73 to 10/74								
Nonparents	0.06	0.05	0.02	0.01	0.03	0.02	0.02	0.02
Parents	0.04	0.08	0.07	0.03	0.03	0.02	0.02	0.02
6/72 to 10/73								
Nonparents	0.06	0.06	-0.05	0.00	0.03	0.03	0.03	0.03
Parents	0.05	0.03	0.01	0.03	0.02	0.02	0.02	0.02
Before 6/72								
Nonparents	0.00	0.30	0.21	0.14	0.16	0.14	0.14	0.15
Parents	0.09	0.05	-0.06	0.00	0.05	0.04	0.04	0.04

Table 11.19

Results of the Analysis of the Community Orientation Measures for NLS Respondents Who Were Married as of October 1973

Parenthood Status as of October 1976	Sample Means				Sample Sizes			
	1972	1973	1974	1976	1972	1973	1974	1976
FEMALES								
Nonparents	2.15	2.04	2.00	1.92	577	722	709	760
Parents	2.16	2.08	2.03	2.01	1228	1637	1605	1650
After 10/74	2.15	2.06	2.01	1.97	353	455	464	486
11/73-10/74	2.16	2.06	2.04	2.02	353	493	450	448
Before 10/73	2.17	2.11	2.04	2.04	463	675	620	627
Prob. 6/72-10/73	2.13	2.10	2.03	2.01	303	475	435	444
Prob. before 6/72	2.24	2.12	2.06	2.10	160	200	185	183
MALES								
Nonparents	2.20	2.14	2.01	2.02	220	253	260	287
Parents	2.22	2.14	2.09	2.08	574	751	698	752
After 10/74	2.13	2.09	2.09	2.07	137	191	181	199
11/73-10/74	2.27	2.14	2.06	2.05	164	240	212	211
Before 10/73	2.23	2.17	2.11	2.10	219	307	258	277
Prob. 6/72-10/73	2.20	2.16	2.08	2.07	164	235	198	212
Prob. before 6/72	2.29	2.20	2.17	2.19	55	72	60	65

Parenthood Status as of October 1976	Adjusted Means				Standard Errors			
	1972	1973	1974	1976	1972	1973	1974	1976
FEMALES								
Nonparents	2.15	2.04	2.00	1.92	0.02	0.02	0.01	0.02
Parents	2.13	2.04	1.99	1.97	0.02	0.01	0.01	0.01
After 10/74	2.13	2.05	1.99	1.96	0.02	0.02	0.02	0.02
11/73-10/74	2.14	2.02	2.01	1.98	0.02	0.02	0.02	0.02
Before 10/73	2.11	2.05	1.97	1.98	0.02	0.02	0.02	0.02
Prob. 6/72-10/73	2.09	2.06	1.98	1.97	0.03	0.02	0.02	0.02
Prob. before 6/72	2.14	2.03	1.96	2.00	0.04	0.04	0.03	0.04
MALES								
Nonparents	2.20	2.14	2.01	2.02	0.03	0.03	0.02	0.03
Parents	2.20	2.12	2.07	2.07	0.03	0.02	0.02	0.02
After 10/74	2.08	2.06	2.07	2.07	0.04	0.03	0.03	0.03
11/73-10/74	2.26	2.13	2.06	2.06	0.04	0.03	0.03	0.04
Before 10/73	2.22	2.15	2.09	2.08	0.04	0.03	0.03	0.04
Prob. 6/72-10/73	2.20	2.14	2.07	2.05	0.04	0.03	0.03	0.04
Prob. before 6/72	2.29	2.17	2.17	2.16	0.07	0.05	0.06	0.06

Parenthood Status as of October 1976	Differences from Married Nonparents				Standard Errors			
	1972	1973	1974	1976	1972	1973	1974	1976
FEMALES								
Nonparents	----	----	----	----	----	----	----	----
Parents	-0.02	0.01	0.00	0.05	0.02	0.02	0.02	0.02
After 10/74	-0.01	0.01	0.00	0.04	0.03	0.03	0.02	0.02
11/73-10/74	0.00	-0.01	0.01	0.06	0.03	0.03	0.03	0.03
Before 10/73	-0.04	0.02	-0.02	0.06	0.03	0.03	0.03	0.03
Prob. 6/72-10/73	-0.06	0.03	-0.01	0.05	0.03	0.03	0.03	0.03
Prob. before 6/72	0.00	0.00	-0.04	0.08	0.04	0.04	0.04	0.04
MALES								
Nonparents	----	----	----	----	----	----	----	----
Parents	0.01	-0.03	0.07	0.05	0.04	0.03	0.03	0.04
After 10/74	-0.12	-0.08	0.06	0.05	0.05	0.04	0.04	0.04
11/73-10/74	0.06	-0.02	0.05	0.04	0.05	0.04	0.04	0.04
Before 10/73	0.02	0.00	0.09	0.06	0.05	0.04	0.04	0.05
Prob. 6/72-10/73	0.00	0.00	0.07	0.04	0.05	0.04	0.04	0.05
Prob. before 6/72	0.09	0.03	0.16	0.14	0.08	0.06	0.06	0.07

Table 11.20

Regression Results for the Change in Community Orientation Between 1972 and 1976

Variable	Females b	Females t	Males b	Males t
Constant	-0.110	-1.8	-0.159	-2.4
Race/ethnicity				
Black	0.024	1.3	0.056	2.6
Hispanic	0.056	1.9	0.080	2.5
Indian	-0.060	-1.1	0.013	0.2
Oriental	-0.001	-0.0	0.069	1.3
Other minority	0.019	0.5	0.052	1.3
Region				
Northeast	0.030	1.8	0.029	1.6
South	-0.026	-1.8	-0.023	-1.4
West	0.050	2.8	-0.007	-0.4
High school measures				
Ability	-0.0006	-2.1	-0.0003	-1.2
Percentile rank in class	-0.0007	-2.5	-0.0005	-1.9
Academic program	-0.015	-1.0	-0.007	-0.2
Vocational-technical program	-0.000	-0.0	0.008	0.5
Family background				
Father's education	0.0068	2.4	0.0085	2.7
Mother's education	-0.0009	-0.2	0.0020	0.5
Father's occupation (SEI)	0.0003	1.0	-0.0001	-0.3
Mother's professional status	-0.031	-1.5	-0.054	-2.4
Mother's homemaker status	0.006	0.5	-0.018	-1.[illegible]
Postsecondary track (1972)				
4-year student	-0.030	-1.7	-0.032	-1.7
2-year student	-0.054	-2.8	-0.010	-0.5
Vocational-technical student	-0.005	-0.2	-0.021	-0.7
Military	0.005	0.0	0.040	1.3
Homemaker	-0.010	-0.4		
Unemployed	0.015	0.7	0.036	1.3
Marital status (1976)				
Months since first marriage	0.0001	0.2	-0.0018	-2.3
Married	-0.054	-2.8	0.043	2.0
Divorced, widowed, or separated	-0.006	-0.2	0.034	0.8
Expecting to be married	0.004	0.2	0.034	1.6
Parenthood				
Parent by October 1973	0.046	1.7	0.029	0.7
Parent Nov. 1973 to Oct. 1974	0.040	1.7	-0.057	-1.6
Parent Nov. 1974 to Oct. 1976	0.030	1.6	0.008	0.4
Expecting parenthood, 1976	0.010	0.4	0.007	0.2
Two or more children, 1976	0.006	0.2	0.050	1.5
R^2	0.019		0.012	
S	0.467		0.505	
F	4.5		2.8	
N	7358		6977	

Table 11.21

Mean Values of the Family Orientation Measures by Marital and Parenthood Status

Parenthood Status as of October 1976	Sample Means				Sample Sizes			
	1972	1973	1974	1976	1972	1973	1974	1976
SINGLE FEMALES								
Nonparents	0.92	1.00	1.01	1.03	3260	4049	4063	4207
Parents	0.86	0.99	0.99	1.00	278	388	395	398
After 10/74	0.81	0.99	0.99	1.01	105	149	147	155
11/73-10/74	0.89	1.00	0.99	1.01	102	130	142	134
Before 10/73	0.88	0.96	1.00	0.98	71	109	106	109
Prob. 6/72-10/73	0.85	0.98	1.00	0.97	32	65	62	65
Prob. before 6/72	0.91	0.93	1.01	0.99	39	44	44	44
EVER MARRIED FEMALES								
Nonparents	0.96	1.08	1.13	1.15	2092	2612	2618	2723
Parents	0.99	1.11	1.14	1.13	1853	2429	2399	2465
After 10/74	0.99	1.11	1.15	1.15	795	1023	1022	1080
11/73-10/74	0.97	1.10	1.14	1.13	471	639	615	592
Before 10/73	1.00	1.10	1.12	1.10	518	745	690	690
Prob. 6/72-10/73	0.98	1.11	1.14	1.12	339	524	487	487
Prob. before 6/72	1.04	1.08	1.07	1.06	179	221	203	203
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	0.97	1.05	1.10	1.17	1072	1320	1339	1366
Parents	0.97	1.02	1.09	1.12	234	326	325	338
11/73 to 10/74								
Nonparents	0.97	1.08	1.18	1.15	438	585	575	594
Parents	1.01	1.08	1.15	1.14	393	492	477	502
6/72 to 10/73								
Nonparents	0.94	1.12	1.15	1.11	507	607	614	664
Parents	0.97	1.14	1.15	1.14	984	1263	1255	1281
Before 6/72								
Nonparents	0.98	1.12	1.14	1.08	63	88	86	92
Parents	1.05	1.11	1.14	1.12	236	339	337	339
SINGLE MALES								
Nonparents	0.90	0.98	0.98	1.00	4264	5217	5255	5547
Parents	0.82	0.91	0.96	1.00	162	204	205	227
After 10/74	0.84	0.94	0.98	1.01	92	116	105	127
11/73-10/74	0.80	0.84	0.97	1.00	54	65	79	77
Before 10/73	0.77	0.94	0.89	0.94	16	23	21	23
EVER MARRIED MALES								
Nonparents	0.94	1.04	1.06	1.08	1523	1797	1823	1948
Parents	0.94	1.04	1.07	1.05	1161	1465	1419	1532
After 10/74	0.94	1.06	1.08	1.06	610	764	750	824
11/73-10/74	0.93	1.05	1.07	1.05	259	359	345	332
Before 10/73	0.97	1.02	1.04	1.02	221	322	276	292
Prob. 6/72-10/73	0.96	1.03	1.04	1.00	167	249	214	226
Prob. before 6/72	1.01	0.96	1.00	1.08	54	73	62	66
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	0.94	1.04	1.04	1.08	982	1159	1173	1251
Parents	0.91	1.04	1.05	1.06	277	335	339	374
11/73 to 10/74								
Nonparents	0.95	1.04	1.11	1.08	317	381	389	412
Parents	0.94	1.05	1.07	1.04	315	387	391	413
6/72 to 10/73								
Nonparents	0.97	1.06	1.09	1.05	208	237	248	271
Parents	0.95	1.05	1.07	1.04	480	622	577	622
Before 6/72								
Nonparents	0.92	1.00	0.97	0.90	8	10	10	10
Parents	1.00	1.01	1.08	1.10	82	117	106	119

TABLE 11.22

ADJUSTED MEAN VALUES OF THE FAMILY ORIENTATION MEASURES BY MARITAL AND PARENTHOOD STATUS

Parenthood Status as of October 1976	Adjusted Means				Standard Errors			
	1972	1973	1974	1976	1972	1973	1974	1976
SINGLE FEMALES								
Nonparents	0.92	1.00	1.01	1.03	0.01	0.01	0.01	0.01
Parents	0.86	1.00	1.02	1.03	0.03	0.02	0.02	0.02
After 10/74	0.80	1.00	1.01	1.03	0.04	0.03	0.03	0.03
11/73-10/74	0.89	1.03	1.03	1.05	0.04	0.03	0.03	0.03
Before 10/73	0.90	0.99	1.04	1.02	0.05	0.04	0.04	0.04
Prob. 6/72-10/73	0.86	1.00	1.03	1.01	0.07	0.05	0.05	0.05
Prob. before 6/72	0.93	0.97	1.05	1.04	0.07	0.06	0.06	0.06
EVER MARRIED FEMALES								
Nonparents	0.94	1.06	1.11	1.13	0.01	0.01	0.01	0.01
Parents	0.96	1.10	1.12	1.12	0.01	0.01	0.01	0.01
After 10/74	0.96	1.10	1.12	1.14	0.02	0.01	0.01	0.01
11/73-10/74	0.95	1.09	1.11	1.11	0.02	0.02	0.02	0.02
Before 10/73	0.98	1.10	1.10	1.10	0.02	0.01	0.02	0.02
Prob. 6/72-10/73	0.96	1.11	1.12	1.11	0.02	0.02	0.02	0.02
Prob. before 6/72	1.02	1.08	1.06	1.06	0.03	0.03	0.03	0.03
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	0.96	1.04	1.09	1.16	0.01	0.01	0.01	0.01
Parents	0.96	1.02	1.09	1.13	0.03	0.02	0.02	0.02
11/73 to 10/74								
Nonparents	0.95	1.07	1.15	1.13	0.02	0.02	0.02	0.02
Parents	0.99	1.08	1.13	1.13	0.02	0.02	0.02	0.02
6/72 to 10/73								
Nonparents	0.90	1.10	1.11	1.09	0.02	0.02	0.02	0.02
Parents	0.94	1.13	1.12	1.12	0.01	0.01	0.01	0.01
Before 6/72								
Nonparents	0.92	1.09	1.07	1.04	0.05	0.04	0.04	0.04
Parents	1.01	1.09	1.10	1.10	0.03	0.02	0.02	0.02
SINGLE MALES								
Nonparents	0.90	0.98	0.98	1.00	0.01	0.01	0.01	0.00
Parents	0.83	0.92	0.99	1.02	0.03	0.03	0.03	0.03
After 10/74	0.86	0.95	1.00	1.03	0.05	0.04	0.04	0.03
11/73-10/74	0.81	0.86	0.99	1.02	0.06	0.05	0.04	0.04
Before 10/73	0.78	0.96	0.90	0.95	0.11	0.08	0.08	0.08
EVER MARRIED MALES								
Nonparents	0.93	1.03	1.04	1.06	0.01	0.01	0.01	0.01
Parents	0.92	1.02	1.04	1.02	0.01	0.01	0.01	0.01
After 10/74	0.92	1.03	1.05	1.03	0.02	0.01	0.01	0.01
11/73-10/74	0.92	1.03	1.05	1.02	0.03	0.02	0.02	0.02
Before 10/73	0.95	1.00	1.01	1.00	0.03	0.02	0.02	0.02
Prob. 6/72-10/73	0.94	1.02	1.02	0.98	0.03	0.02	0.03	0.02
Prob. before 6/72	0.99	0.94	0.97	1.05	0.06	0.04	0.05	0.05
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	0.93	1.03	1.02	1.07	0.01	0.01	0.01	0.01
Parents	0.90	1.02	1.03	1.03	0.03	0.02	0.02	0.02
11/73 to 10/74								
Nonparents	0.93	1.03	1.08	1.06	0.02	0.02	0.02	0.02
Parents	0.92	1.03	1.04	1.02	0.02	0.02	0.02	0.02
6/72 to 10/73								
Nonparents	0.95	1.03	1.05	1.02	0.03	0.02	0.02	0.02
Parents	0.93	1.03	1.04	1.01	0.02	0.02	0.02	0.02
Before 6/72								
Nonparents	0.88	0.98	0.92	0.87	0.15	0.12	0.12	0.12
Parents	0.97	0.98	1.04	1.06	0.05	0.03	0.04	0.03

Table 11.23

Intergroup Differences in Adjusted Means for the Family Orientation Measures

Parenthood Status as of October 1976	Differences from Single nonparents				Standard Errors			
	1972	1973	1974	1976	1972	1973	1974	1976
SINGLE FEMALES								
Nonparents	----	----	----	----	----	----	----	----
Parents	-0.07	0.00	0.01	0.00	0.03	0.02	0.02	0.02
After 10/74	-0.13	0.00	0.00	0.00	0.04	0.03	0.03	0.03
11/73-10/74	-0.03	0.02	0.01	0.01	0.04	0.03	0.03	0.03
Before 10/73	-0.03	-0.02	0.03	-0.01	0.05	0.04	0.04	0.04
Prob. 6/72-10/73	-0.07	0.00	0.01	-0.03	0.07	0.05	0.05	0.05
Prob. before 6/72	0.00	-0.04	0.04	0.01	0.07	0.06	0.06	0.06
EVER MARRIED FEMALES								
Nonparents	0.02	0.06	0.09	0.09	0.01	0.01	0.01	0.01
Parents	0.04	0.09	0.10	0.09	0.01	0.01	0.01	0.01
After 10/74	0.03	0.09	0.11	0.10	0.02	0.01	0.01	0.01
11/73-10/74	0.02	0.09	0.10	0.08	0.02	0.02	0.02	0.02
Before 10/73	0.05	0.09	0.09	0.06	0.02	0.02	0.02	0.02
Prob. 6/72-10/73	0.03	0.10	0.11	0.08	0.02	0.02	0.02	0.02
Prob. before 6/72	0.09	0.08	0.05	0.03	0.03	0.03	0.03	0.03
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	0.04	0.04	0.08	0.12	0.01	0.01	0.01	0.01
Parents	0.04	0.02	0.07	0.09	0.03	0.02	0.02	0.02
11/73 to 10/74								
Nonparents	0.02	0.06	0.14	0.10	0.02	0.02	0.02	0.02
Parents	0.06	0.07	0.12	0.10	0.02	0.02	0.02	0.02
6/72 to 10/73								
Nonparents	-0.02	0.10	0.10	0.05	0.02	0.02	0.02	0.02
Parents	0.01	0.12	0.11	0.09	0.02	0.01	0.01	0.01
Before 6/72								
Nonparents	0.00	0.08	0.06	0.00	0.05	0.04	0.04	0.04
Parents	0.09	0.09	0.09	0.07	0.03	0.02	0.02	0.02
SINGLE MALES								
Nonparents	----	----	----	----	----	----	----	----
Parents	-0.07	-0.06	0.00	0.02	0.04	0.03	0.03	0.03
After 10/74	-0.05	-0.03	0.01	0.03	0.05	0.04	0.04	0.03
11/73-10/74	-0.09	-0.12	0.01	0.02	0.06	0.05	0.04	0.04
Before 10/73	-0.13	-0.02	-0.09	-0.05	0.11	0.08	0.08	0.08
EVER MARRIED MALES								
Nonparents	0.03	0.05	0.05	0.06	0.01	0.01	0.01	0.01
Parents	0.02	0.04	0.05	0.02	0.01	0.01	0.01	0.01
After 10/74	0.02	0.05	0.06	0.03	0.02	0.01	0.02	0.01
11/73-10/74	0.01	0.05	0.06	0.02	0.03	0.02	0.02	0.02
Before 10/73	0.05	0.02	0.02	0.00	0.03	0.02	0.02	0.02
Prob. 6/72-10/73	0.04	0.04	0.04	-0.02	0.03	0.02	0.03	0.03
Prob. before 6/72	0.09	-0.04	-0.02	0.05	0.06	0.04	0.05	0.05
TIMING OF FIRST MARRIAGE:								
After 10/74								
Nonparents	0.03	0.05	0.04	0.07	0.01	0.01	0.01	0.01
Parents	0.00	0.04	0.04	0.03	0.03	0.02	0.02	0.02
11/73 to 10/74								
Nonparents	0.03	0.05	0.10	0.06	0.02	0.02	0.02	0.02
Parents	0.02	0.05	0.06	0.01	0.03	0.02	0.02	0.02
6/72 to 10/73								
Nonparents	0.05	0.06	0.07	0.01	0.03	0.02	0.02	0.02
Parents	0.03	0.05	0.06	0.01	0.02	0.02	0.02	0.02
Before 6/72								
Nonparents	-0.03	0.00	-0.06	-0.13	0.15	0.12	0.12	0.12
Parents	0.07	0.00	0.05	0.06	0.05	0.03	0.04	0.03

Table 11.24

Results of the Analysis of the Family Orientation Measures for NLS Respondents Who Were Married as of October 1973

Parenthood Status as of October 1976	Sample Means 1972	1973	1974	1976	Sample Sizes 1972	1973	1974	1976
			FEMALES					
Nonparents	0.94	1.12	1.15	1.11	570	695	700	756
Parents	0.98	1.13	1.15	1.13	1220	1602	1592	1620
After 10/74	0.98	1.16	1.17	1.17	352	442	460	480
11/73-10/74	0.96	1.13	1.14	1.12	350	483	448	438
Before 10/73	1.00	1.12	1.13	1.11	459	665	613	614
Prob. 6/72-10/73	0.99	1.13	1.15	1.13	302	470	432	435
Prob. before 6/72	1.03	1.09	1.07	1.08	157	195	181	179
			MALES					
Nonparents	0.97	1.06	1.08	1.05	216	247	258	281
Parents	0.96	1.04	1.07	1.05	562	739	683	741
After 10/74	0.99	1.05	1.10	1.08	136	188	177	197
11/73-10/74	0.94	1.07	1.10	1.06	161	238	207	208
Before 10/73	0.96	1.02	1.04	1.02	213	302	255	272
Prob. 6/72-10/73	0.95	1.03	1.05	1.00	160	232	196	209
Prob. before 6/72	1.01	0.98	1.01	1.07	53	70	59	63

Parenthood Status as of October 1976	Adjusted Means 1972	1973	1974	1976	Standard Errors 1972	1973	1974	1976
			FEMALES					
Nonparents	0.94	1.12	1.15	1.11	0.02	0.01	0.01	0.01
Parents	0.99	1.15	1.16	1.15	0.01	0.01	0.01	0.01
After 10/74	0.97	1.16	1.17	1.16	0.02	0.02	0.02	0.02
11/73-10/74	0.97	1.14	1.16	1.14	0.02	0.02	0.02	0.02
Before 10/73	1.01	1.14	1.16	1.14	0.02	0.02	0.02	0.02
Prob. 6/72-10/73	0.99	1.15	1.18	1.15	0.02	0.02	0.02	0.02
Prob. before 6/72	1.04	1.13	1.10	1.12	0.03	0.03	0.03	0.03
			MALES					
Nonparents	0.97	1.06	1.08	1.05	0.03	0.02	0.02	0.02
Parents	0.97	1.05	1.07	1.06	0.02	0.02	0.02	0.02
After 10/74	1.00	1.05	1.11	1.09	0.03	0.02	0.03	0.02
11/73-10/74	0.94	1.08	1.11	1.06	0.03	0.02	0.03	0.02
Before 10/73	0.98	1.03	1.03	1.03	0.03	0.03	0.03	0.03
Prob. 6/72-10/73	0.96	1.05	1.04	1.01	0.04	0.03	0.03	0.03
Prob. before 6/72	1.05	0.99	1.00	1.07	0.06	0.04	0.05	0.05

Parenthood Status as of October 1976	Differences from Married Nonparents 1972	1973	1974	1976	Standard Errors 1972	1973	1974	1976
			FEMALES					
Nonparents	----	----	----	----	----	----	----	----
Parents	0.05	0.03	0.02	0.04	0.02	0.02	0.02	0.02
After 10/74	0.03	0.04	0.02	0.05	0.02	0.02	0.02	0.02
11/73-10/74	0.03	0.02	0.01	0.03	0.03	0.02	0.02	0.02
Before 10/73	0.07	0.02	0.01	0.03	0.03	0.02	0.02	0.02
Prob. 6/72-10/73	0.05	0.03	0.03	0.04	0.03	0.02	0.02	0.02
Prob. before 6/72	0.10	0.01	-0.04	0.01	0.04	0.03	0.03	0.03
			MALES					
Nonparents	----	----	----	----	----	----	----	----
Parents	0.00	0.00	0.00	0.01	0.03	0.03	0.03	0.03
After 10/74	0.03	0.00	0.03	0.05	0.04	0.03	0.03	0.03
11/73-10/74	-0.03	0.02	0.02	0.02	0.04	0.03	0.03	0.03
Before 10/73	0.01	-0.02	-0.05	-0.02	0.04	0.03	0.04	0.03
Prob. 6/72-10/73	-0.01	-0.01	-0.04	-0.03	0.04	0.03	0.04	0.03
Prob. before 6/72	0.08	-0.06	-0.08	0.03	0.06	0.05	0.05	0.05

Table 11.24 offers evidence that parenthood affects family orientation. Women who became mothers before October 1973 displayed slightly stronger family orientations in the base year survey, and recent mothers (those giving birth after October 1974) exhibited slightly stronger family orientations in the 1976 survey. On average, the parenthood effects are small, however, compared with the marriage effects observable from the entries in Table 11.23. Moreover, the data in Table 11.24 do not provide any consistent evidence that parenthood affects family orientation for men.

Table 11.23 shows that women who became single mothers at any time during the four years are somewhat less family-oriented on average than other single women in 1972, and about the same as other single women in other years. The data provide no evidence of systematic changes in family orientation associated with the timing of parenthood. In part, this may reflect the content of the items used to create the family orientation measure. None of the three items mentions children, but one asks respondents to rate the importance of finding the right person to marry and having a happy family life. The fact that the item links marriage with a happy family life may have produced a somewhat different response pattern for single mothers than for their married counterparts, for reasons unrelated to the item's intended meaning. Whether or not that is so, the fact that single mothers display a different pattern from married mothers on both the family and work orientation measures suggests that the experience of parenthood has rather different effects on their orientations to these respective roles. This is as one would expect, given the profound differences in the nature of their parental responsibilities and resources.

The results of our covariance analysis of the family orientation measures are displayed in Table 11.25. These results generally corroborate the findings derived from our individual effects analysis. Specifically, they show: (1) significant positive effects due to marriage for both sexes, but especially for females; and (2) marginally significant positive effects due to parenthood, but only for females. In addition, they indicate that females who were planning to marry or become parents in 1976 showed anticipatory positive effects (similar to the anticipatory effects on work orientation noted earlier). Finally, Table 11.25 shows a significant negative coefficient associated with months since first marriage for women, and a similar negative coefficient on this variable for men. There are two alternative interpretations for this coefficient: First, the increases in family orientation associated with marriage may tend to wear off over time; second, those who marry early may be less affected in their family orientation than those who marry later. Of course, these interpretations are not mutually exclusive. The entries in Table 11.23 provide clear evidence in support of the first interpretation, showing that the size of intergroup differences tends to decline for each group with the length of time since first marriage. The second possibility is more difficult to assess with the data presently available.

Table 11.25

Regression Results for the Change in Family Orientation Between 1972 and 1976

Variable	Females b	Females t	Males b	Males t
Constant	0.058	1.0	0.161	2.7
Race/ethnicity				
Black	-0.036	-2.0	-0.021	-1.0
Hispanic	-0.011	-0.4	-0.074	-2.6
Indian	0.009	0.2	0.026	0.5
Oriental	-0.001	-0.0	-0.084	-1.7
Other minority	0.004	0.1	-0.040	-1.1
Region				
Northeast	-0.036	-2.3	-0.003	-0.2
South	-0.045	-3.2	-0.015	-1.0
West	-0.004	-0.2	0.019	1.1
High school measures				
Ability	-0.0000	-0.0	0.0001	0.2
Percentile rank in class	-0.0001	-0.3	-0.0003	-1.3
Academic program	-0.007	-0.5	-0.006	-0.4
Vocational-technical program	-0.013	-0.9	-0.001	-0.1
Family background				
Father's education	0.0029	1.1	0.0027	0.9
Mother's education	0.0053	1.5	-0.0061	-1.7
Father's occupation (SEI)	0.0003	1.2	-0.0002	-0.6
Mother's professional status	-0.021	-1.1	0.061	2.9
Mother's homemaker status	-0.020	-1.7	0.008	0.7
Postsecondary track (1972)				
4-year student	-0.038	-2.2	-0.024	-1.4
2-year student	-0.066	-3.6	-0.019	-1.0
Vocational-technical student	0.005	0.2	-0.027	-1.1
Military	0.238	2.1	0.005	0.2
Homemaker	-0.009	-0.3		
Unemployed	-0.004	-0.2	0.075	3.0
Marital status (1976)				
Months since first marriage	-0.0011	-2.1	-0.0008	-1.2
Married	0.093	5.0	0.047	2.4
Divorced, widowed, or separated	0.031	1.0	-0.062	-1.6
Expecting to be married	0.054	2.8	0.026	1.3
Parenthood				
Parent by October 1973	-0.002	-0.1	-0.052	-1.3
Parent Nov. 1973 to Oct. 1974	0.028	1.2	-0.004	-0.1
Parent Nov. 1974 to Oct. 1976	0.040	2.2	0.005	0.2
Expecting parenthood, 1976	0.057	2.4	-0.020	-0.7
Two or more children, 1976	-0.023	-1.0	0.028	0.9
R^2	0.018		0.010	
S	0.445		0.451	
F	4.2		2.3	
N	7209		6803	

Sex Role Attitudes

The NLS survey provides only cross-sectional data concerning sex role attitudes, those measures having been introduced for the first time in 1976. Lacking information about how respondents might have scored in 1972, we are unable to say which of the differences that exist in 1976 may have increased and which decreased over the four-year period.

Table 11.26 presents the means by sex and marital/parenthood status for each of the two summary factor scores. Inspection of the table reveals noteworthy sex differences. Women score lower than men on Measure A (traditional attitudes concerning the priority of family over work for women), and higher on Measure B (nontraditional attitudes concerning equality of opportunity). These sex differences are apparent for every marital category, but are especially pronounced among single nonparents.

For both men and women, there are substantial differences by marital/parenthood category. As might be expected, respondents who were married and/or parents expressed more traditional views on Measure A, which pertains to family roles. In addition, married women and mothers also expressed more traditional views on Measure B, which pertains to job equality. Although married men's views toward job equality are also somewhat more conservative, their views seem unrelated to parenthood status.

Table 11.27 presents the analogous means after they have been adjusted for preexisting differences in background measures. The differences across marital/parenthood categories are substantially reduced, indicating that some of the differences in the raw means are accounted for by factors other than marital or parenthood status.

Tables 11.28 and 11.29 summarize the intergroup differences that remain after these adjustments have been made. For Measure A, probable marriage effects appear quite clearly among women. Compared with single nonparents, women who are married but childless score about one-eighth of a standard deviation higher, and married mothers one-third of a standard deviation higher, even after the means have been adjusted. Moreover, the pattern of intergroup differences is related to the timing of marriage. The recently married had the highest means compared with the control group. These data strongly suggest a marriage effect, although we must caution that the cross-sectional nature of the analysis makes it impossible to rule out other interpretations involving preexisting differences.

The data pertaining to marriage effects on Measure A for men are less clear-cut. Married nonparents do not differ significantly from single nonparents. However, *recently* married men were more traditional on average than their single counterparts.

The entries in Table 11.29 suggest parenthood effects on Measure A as well. Both male and female parents displayed somewhat greater traditionality than married nonparents in their views of work/family priorities for women. Among women, the effects appear stronger in recent parents than in early parents. The comparable entries for single mothers in Table 11.28 indicate that these women

TABLE 11.26

MEAN VALUES OF THE 1976 SEX ROLE ATTITUDE MEASURES BY MARITAL AND PARENTHOOD STATUS

Parenthood Status as of October 1976	Sample Means		Sample Sizes	
	Measure A	Measure B	Measure A	Measure B
	SINGLE FEMALES			
Nonparents	2.03	2.60	3859	3859
Parents	2.20	2.49	367	367
After 10/74	2.19	2.46	145	145
11/73-10/74	2.22	2.52	123	123
Before 10/73	2.17	2.50	99	99
Prob. 6/72-10/73	2.16	2.48	62	62
Prob. before 6/72	2.20	2.53	37	37
	EVER MARRIED FEMALES			
Nonparents	2.17	2.46	2521	2521
Parents	2.35	2.42	2293	2293
After 10/74	2.36	2.41	1001	1001
11/73-10/74	2.38	2.43	563	563
Before 10/73	2.29	2.43	631	631
Prob. 6/72-10/73	2.31	2.43	447	447
Prob. before 6/72	2.26	2.41	184	184
TIMING OF FIRST MARRIAGE:				
After 10/74				
Nonparents	2.17	2.49	1262	1262
Parents	2.34	2.45	313	313
11/73 to 10/74				
Nonparents	2.16	2.43	557	557
Parents	2.37	2.43	467	467
6/72 to 10/73				
Nonparents	2.17	2.46	607	607
Parents	2.36	2.42	1190	1190
Before 6/72				
Nonparents	2.19	2.41	88	88
Parents	2.32	2.39	319	319
	SINGLE MALES			
Nonparents	2.34	2.43	4912	4912
Parents	2.43	2.41	203	203
After 10/74	2.39	2.44	116	116
11/73-10/74	2.52	2.36	68	68
Before 10/73	2.36	2.38	19	19
	EVER MARRIED MALES			
Nonparents	2.41	2.37	1791	1791
Parents	2.51	2.35	1374	1374
After 10/74	2.54	2.34	743	743
11/73-10/74	2.49	2.36	295	295
Before 10/73	2.48	2.34	261	261
Prob. 6/72-10/73	2.48	2.36	203	203
Prob. before 6/72	2.48	2.29	58	58
TIMING OF FIRST MARRIAGE:				
After 10/74				
Nonparents	2.42	2.37	1148	1148
Parents	2.55	2.35	335	335
11/73 to 10/74				
Nonparents	2.41	2.36	388	388
Parents	2.52	2.34	370	370
6/72 to 10/73				
Nonparents	2.36	2.35	242	242
Parents	2.48	2.35	558	558
Before 6/72				
Nonparents	2.52	2.35	10	10
Parents	2.49	2.32	107	107

Table 11.27

Adjusted Mean Values of the 1976 Sex Role Attitude Measures by Marital and Parenthood Status

Parenthood Status as of October 1976	Adjusted Means		Standard Errors	
	Measure A	Measure B	Measure A	Measure B
SINGLE FEMALES				
Nonparents	2.03	2.60	0.01	0.01
Parents	2.08	2.61	0.03	0.03
After 10/74	2.05	2.58	0.04	0.04
11/73-10/74	2.12	2.62	0.05	0.04
Before 10/73	2.05	2.62	0.05	0.05
Prob. 6/72-10/73	1.99	2.64	0.07	0.06
Prob. before 6/72	2.13	2.63	0.09	0.08
EVER MARRIED FEMALES				
Nonparents	2.10	2.52	0.01	0.01
Parents	2.21	2.52	0.01	0.01
After 10/74	2.24	2.51	0.02	0.02
11/73-10/74	2.21	2.55	0.02	0.02
Before 10/73	2.15	2.54	0.02	0.02
Prob. 6/72-10/73	2.17	2.53	0.03	0.02
Prob. before 6/72	2.10	2.54	0.04	0.04
TIMING OF FIRST MARRIAGE:				
After 10/74				
Nonparents	2.13	2.51	0.01	0.01
Parents	2.24	2.52	0.03	0.03
11/73 to 10/74				
Nonparents	2.08	2.49	0.02	0.02
Parents	2.23	2.52	0.02	0.02
6/72 to 10/73				
Nonparents	2.05	2.55	0.02	0.02
Parents	2.21	2.52	0.02	0.02
Before 6/72				
Nonparents	2.00	2.55	0.06	0.05
Parents	2.15	2.53	0.03	0.03
SINGLE MALES				
Nonparents	2.34	2.43	0.01	0.01
Parents	2.39	2.41	0.04	0.03
After 10/74	2.34	2.44	0.05	0.04
11/73-10/74	2.49	2.35	0.06	0.05
Before 10/73	2.29	2.39	0.11	0.10
EVER MARRIED MALES				
Nonparents	2.35	2.41	0.01	0.01
Parents	2.40	2.40	0.01	0.01
After 10/74	2.43	2.39	0.02	0.02
11/73-10/74	2.38	2.41	0.03	0.03
Before 10/73	2.37	2.39	0.03	0.03
Prob. 6/72-10/73	2.38	2.40	0.03	0.03
Prob. before 6/72	2.34	2.35	0.06	0.06
TIMING OF FIRST MARRIAGE:				
After 10/74				
Nonparents	2.37	2.40	0.01	0.01
Parents	2.45	2.39	0.03	0.02
11/73 to 10/74				
Nonparents	2.34	2.40	0.02	0.02
Parents	2.41	2.39	0.03	0.02
6/72 to 10/73				
Nonparents	2.25	2.41	0.03	0.03
Parents	2.37	2.41	0.02	0.02
Before 6/72				
Nonparents	2.43	2.40	0.15	0.13
Parents	2.34	2.40	0.05	0.04

Table 11.28

Intergroup Differences in Adjusted Means of the 1976 Sex Role Attitude Measures

Parenthood Status as of October 1976	Differences from Single Nonparents		Standard Errors	
	Measure A	Measure B	Measure A	Measure B
SINGLE FEMALES				
Nonparents	----	----	----	----
Parents	0.05	0.01	0.03	0.03
After 10/74	0.02	-0.02	0.04	0.04
11/73-10/74	0.09	0.02	0.05	0.04
Before 10/73	0.02	0.02	0.05	0.05
Prob. 6/72-10/73	-0.05	0.04	0.07	0.06
Prob. before 6/72	0.09	0.03	0.09	0.08
EVER MARRIED FEMALES				
Nonparents	0.07	-0.09	0.01	0.01
Parents	0.18	-0.08	0.02	0.01
After 10/74	0.21	-0.10	0.02	0.02
11/73-10/74	0.18	-0.05	0.02	0.02
Before 10/73	0.11	-0.06	0.02	0.02
Prob. 6/72-10/73	0.14	-0.07	0.03	0.02
Prob. before 6/72	0.07	-0.06	0.04	0.04
TIMING OF FIRST MARRIAGE:				
After 10/74				
Nonparents	0.10	-0.09	0.02	0.02
Parents	0.21	-0.08	0.03	0.03
11/73 to 10/74				
Nonparents	0.05	-0.12	0.02	0.02
Parents	0.20	-0.08	0.03	0.02
6/72 to 10/73				
Nonparents	0.02	-0.06	0.02	0.02
Parents	0.18	-0.08	0.02	0.02
Before 6/72				
Nonparents	-0.03	-0.05	0.06	0.05
Parents	0.12	-0.07	0.03	0.03
SINGLE MALES				
Nonparents	----	----	----	----
Parents	0.05	-0.02	0.04	0.03
After 10/74	0.01	0.01	0.05	0.04
11/73-10/74	0.16	-0.07	0.06	0.05
Before 10/73	-0.04	-0.04	0.11	0.10
EVER MARRIED MALES				
Nonparents	0.01	-0.02	0.01	0.01
Parents	0.06	-0.02	0.02	0.01
After 10/74	0.09	-0.04	0.02	0.02
11/73-10/74	0.04	-0.01	0.03	0.03
Before 10/73	0.03	-0.03	0.03	0.03
Prob. 6/72-10/73	0.04	-0.02	0.03	0.03
Prob. before 6/72	0.01	-0.07	0.06	0.06
TIMING OF FIRST MARRIAGE:				
After 10/74				
Nonparents	0.04	-0.02	0.02	0.01
Parents	0.11	-0.03	0.03	0.02
11/73 to 10/74				
Nonparents	0.00	-0.02	0.03	0.02
Parents	0.08	-0.04	0.03	0.02
6/72 to 10/73				
Nonparents	-0.08	-0.01	0.03	0.03
Parents	0.04	-0.01	0.02	0.02
Before 6/72				
Nonparents	0.10	-0.02	0.15	0.13
Parents	0.01	-0.03	0.05	0.04

Table 11.29

Results of the Analysis of the 1976 Sex Role Attitude Measures for NLS Respondents Who Were Married as of October 1973

Parenthood Status as of October 1976	Sample Means		Sample Sizes	
	Measure A	Measure B	Measure A	Measure B
	FEMALES			
Nonparents	2.17	2.45	695	695
Parents	2.35	2.41	1509	1509
After 10/74	2.36	2.40	444	444
11/73-10/74	2.39	2.42	419	419
Before 10/73	2.30	2.42	563	563
Prob. 6/72-10/73	2.32	2.43	401	401
Prob. before 6/72	2.26	2.42	162	162
	MALES			
Nonparents	2.36	2.35	252	252
Parents	2.49	2.35	665	665
After 10/74	2.52	2.34	180	180
11/73-10/74	2.48	2.33	182	182
Before 10/73	2.49	2.35	243	243
Prob. 6/72-10/73	2.49	2.36	188	188
Prob. before 6/72	2.47	2.31	55	55

Parenthood Status as of October 1976	Adjusted Means		Standard Errors	
	Measure A	Measure B	Measure A	Measure B
	FEMALES			
Nonparents	2.17	2.45	0.02	0.02
Parents	2.31	2.41	0.02	0.01
After 10/74	2.34	2.41	0.02	0.02
11/73-10/74	2.34	2.42	0.03	0.02
Before 10/73	2.26	2.42	0.03	0.02
Prob. 6/72-10/73	2.28	2.42	0.03	0.02
Prob. before 6/72	2.20	2.41	0.05	0.04
	MALES			
Nonparents	2.36	2.35	0.03	0.03
Parents	2.47	2.33	0.03	0.02
After 10/74	2.51	2.35	0.04	0.03
11/73-10/74	2.46	2.31	0.04	0.03
Before 10/73	2.47	2.31	0.04	0.03
Prob. 6/72-10/73	2.48	2.32	0.04	0.04
Prob. before 6/72	2.45	2.29	0.07	0.06

Parenthood Status as of October 1976	Differences from Married Nonparents		Standard Errors	
	Measure A	Measure B	Measure A	Measure B
	FEMALES			
Nonparents	----	----	----	----
Parents	0.14	-0.04	0.03	0.02
After 10/74	0.16	-0.05	0.03	0.03
11/73-10/74	0.17	-0.03	0.03	0.03
Before 10/73	0.08	-0.03	0.03	0.03
Prob. 6/72-10/73	0.11	-0.03	0.03	0.03
Prob. before 6/72	0.03	-0.04	0.05	0.04
	MALES			
Nonparents	----	----	----	----
Parents	0.11	-0.02	0.04	0.03
After 10/74	0.15	0.00	0.05	0.04
11/73-10/74	0.10	-0.04	0.05	0.04
Before 10/73	0.11	-0.04	0.05	0.04
Prob. 6/72-10/73	0.11	-0.03	0.05	0.04
Prob. before 6/72	0.08	-0.06	0.08	0.07

may also have become more traditional as a result of parenthood—though for them the effect appears to be considerably smaller.

Tables 11.28 and 11.29 also point to possible marriage/parenthood effects on Measure B, attitudes toward equality of job opportunity. Table 11.28 shows that married women exhibited more traditional views on this subject than did single nonparents. There is a slight difference in the same direction for males.

The entries pertaining to parenthood effects (Table 11.29) suggest that parenthood may produce a slight additional increase in traditionalism among women (over and above the effect of marriage), but that its effects on men are negligible.

Tables 11.30 and 11.31 summarize the results of our covariance analysis of Measures A and B, respectively. The coefficients in Table 11.30 confirm that the early family formation effects are much larger for females than for males. For both sexes, the sizes of the marriage effects decrease over time. The data are consistent with the hypothesis that marriage produces an immediate increase in sex role traditionalism, but that this effect dwindles over time. Also consistent with that interpretation is the fact that, for women, *expecting* to be married has as strong an effect as being married.

The covariance analysis also reveals significant effects associated with actual and expected parenthood. For both sexes, these effects are stronger for recent and anticipated parenthood than for early parenthood. Although this suggests that the effects of parenthood diminish over time, the lack of data from earlier years precludes the possibility of ruling out alternative explanations.

Finally, we note that women who had two or more children by 1976 were more traditional in their views than those with fewer children, even after controlling for the timing of parenthood. The causal status of this effect is very much an open question. It is plausible that the presence of two or more young children might affect sex role traditionalism, and also that traditional attitudes might predispose some women toward larger families.

Table 11.31 reports the result of our covariance analysis for Measure B. Significant coefficients are associated with both actual and expected marriage among women, but only with expected marriage among men. Parenthood effects are weak to nonexistent, and the effects of expected parenthood are significant only for men.

In general, then, the two measures of sex role attitudes display differential responsiveness to marriage and parenthood. Attitudes toward the relative priorities of women's work and family roles appear to be rather strongly related to family formation variables. Both sexes, but especially women, are more likely to express traditional views regarding these roles if they are recently married or have recently become parents. In contrast, attitudes toward sexual equality in the job market appear to be less strongly related to family formation —possibly because they reflect ideological considerations rather than personal priorities.

Table 11.30

Regression Results for 1976 Sex Role Attitudes: Traditional Family Priority

Variable	Females b	Females t	Males b	Males t
Constant	3.13	52.8	3.03	53.5
Race/ethnicity				
Black	-0.246	-13.7	-0.174	-9.0
Hispanic	-0.186	-6.5	-0.129	-4.6
Indian	-0.104	-1.9	-0.082	-1.7
Oriental	0.142	2.7	-0.147	-3.1
Other minority	-0.020	-0.6	-0.082	-2.4
Region				
Northeast	-0.006	-0.4	-0.024	-1.5
South	0.016	1.1	0.036	2.6
West	-0.026	-1.5	-0.004	-0.2
High school measures				
Ability	-0.0045	-18.0	-0.0027	-11.6
Percentile rank in class	0.0004	1.4	0.0006	2.3
Academic program	-0.032	-2.2	-0.027	-1.9
Vocational-technical program	-0.025	-1.8	0.029	2.0
Family background				
Father's education	-0.0067	-2.4	-0.0049	-1.8
Mother's education	-0.0008	-0.2	-0.0034	-1.0
Father's occupation (SEI)	-0.0004	-1.3	-0.0010	-3.5
Mother's professional status	-0.020	-1.0	0.020	1.0
Mother's homemaker status	0.067	5.8	0.077	6.6
Postsecondary track (1972)				
4-year student	-0.109	-6.4	-0.064	-3.9
2-year student	-0.065	-3.5	-0.029	-1.7
Vocational-technical student	-0.009	-0.5	0.058	2.3
Military	0.130	1.2	-0.063	-2.4
Homemaker	0.095	3.6		
Unemployed	0.035	1.8	0.048	2.0
Marital status (1976)				
Months since first marriage	-0.0017	-3.3	-0.0026	-3.8
Married	0.132	7.1	0.053	2.8
Divorced, widowed, or separated	0.009	0.3	0.029	0.8
Expecting to be married	0.136	7.1	0.035	1.9
Parenthood				
Parent by October 1973	0.015	0.6	0.095	2.5
Parent Nov. 1973 to Oct. 1974	0.118	5.1	0.098	3.2
Parent Nov. 1974 to Oct. 1976	0.136	7.5	0.106	5.1
Expecting parenthood, 1976	0.151	6.4	0.127	4.9
Two or more children, 1976	0.124	5.1	0.052	1.7
R^2	0.179		0.094	
S	0.501		0.481	
F	61.6		27.6	
N	9070		8314	

Table 11.31

Regression Results for 1976 Sex Role Attitudes: Equal Employment

Variable	Females b	Females t	Males b	Males t
Constant	1.83	34.1	1.90	38.4
Race/ethnicity				
Black	0.100	6.2	0.156	9.3
Hispanic	0.152	5.9	0.172	7.1
Indian	0.140	2.9	0.050	1.1
Oriental	0.035	0.7	0.190	4.6
Other minority	0.092	2.9	0.035	1.2
Region				
Northeast	0.031	2.2	-0.000	-0.0
South	-0.017	-1.3	-0.018	-1.5
West	0.051	3.2	0.015	1.0
High school measures				
Ability	0.0030	13.3	0.0017	8.1
Percentile rank in class	-0.0013	-5.6	-0.0008	-3.8
Academic program	0.039	3.0	0.022	1.8
Vocational-technical program	0.009	0.8	0.006	0.4
Family background				
Father's education	0.0041	1.6	0.0026	1.1
Mother's education	0.0070	2.2	0.0111	3.6
Father's occupation (SEI)	0.0002	0.7	0.0002	0.8
Mother's professional status	0.016	0.9	0.009	0.5
Mother's homemaker status	-0.017	-1.6	-0.009	-0.9
Postsecondary track (1972)				
4-year student	0.072	4.6	0.039	2.7
2-year student	0.039	2.3	0.013	0.8
Vocational-technical student	-0.021	-1.2	-0.011	-0.5
Military	0.056	0.6	0.062	2.7
Homemaker	0.019	0.8		
Unemployed	-0.019	-1.0	0.020	0.9
Marital status (1976)				
Months since first marriage	0.0002	0.5	0.0006	1.0
Married	-0.107	-6.4	-0.027	-1.6
Divorced, widowed, or separated	-0.036	-1.3	-0.048	-1.5
Expecting to be married	-0.090	-5.2	-0.045	-2.7
Parenthood				
Parent by October 1973	0.007	0.3	-0.038	-1.1
Parent Nov. 1973 to Oct. 1974	0.016	0.8	-0.026	-1.0
Parent Nov. 1974 to Oct. 1976	-0.021	-1.3	-0.028	-1.5
Expecting parenthood, 1976	-0.040	-1.9	-0.058	-2.6
Two or more children, 1976	-0.019	-0.8	-0.011	-0.4
R^2	0.093		0.044	
S	0.453		0.420	
F	29.1		12.2	
N	9070		8314	

XII. CONCLUSIONS

The analyses reported in previous sections have clarified the relationships between early family formation and a number of specific outcomes measuring various aspects of young people's lives. This final section draws together the various strands of our research and highlights two transcending conclusions.

Our first conclusion is that the direct consequences of teenage parenthood upon young people's ambitions and attainments are not as severe as one would surmise from comparisons of outcome measures between early parents and their peers. The young parents among the NLS participants differed markedly from their classmates on almost every attribute that we examined. As a group, they ranked much lower than their classmates on measures of ability, scholastic performance, socioeconomic status, and educational expectations. As high school seniors, they had notably different postsecondary plans, career goals, and attitudes. These preexisting differences between parents and nonparents would have led to very different outcomes even in the absence of parenthood, and undoubtedly there are other fundamental differences that have gone unrecognized because measures of them were not available.

The conclusion that most of the differences in outcomes between teenage parents and nonparents stem from preexisting differences has important implications for policymakers trying to interpret the sequelae of teenage parenthood. Our analysis of postsecondary educational plans furnishes a good illustration. It shows that most of the NLS participants who became parents the year after high school had not previously planned to enter college anyway. Rather than *causing* a reduction in educational aspirations, early parenthood may simply reflect the realization of other plans that were not linked with further education. Early parents, who are not part of the "college-going crowd" in high school and who do not share the aims and criteria for success of many of their classmates, appear to seek other goals in life—goals that are more compatible with early marriage and parenthood. The stereotypical view of teenage parenthood as invariably interfering with educational plans clearly must be qualified. We cannot infer that teenage parenthood interferes with educational plans, when most of the teenage parents had other plans long before they became parents.

Our second broad conclusion relates to separately identifiable effects of teenage parenthood and teenage marriage. The NLS, with its large sample sizes and comprehensive background information, affords an unusual opportunity to compare these two modes of family formation. In comparing respondents who became married parents as teenagers with those who married but had no children, we find that many of the effects that would ordinarily be attributed to parenthood also show up as effects among the nonparents who married at about the same time. For example, the early parents and the single nonparents

differed substantially in educational aspirations even after allowing for numerous background characteristics, but the differences were almost as large for married teenagers who remained childless for three years. If policymakers are concerned about the consequences of teenage parenthood, they should also consider the consequences of teenage marriage, whether or not the young couple have children.

This is not to say that we found no apparent effects of parenthood. To the contrary, we found a number of important, and often predictable, effects. Married women display a clear decline in career aspirations after they become mothers, and their educational attainments and educational expectations decline to a lesser extent. Mothers have considerably lower hourly wage rates than nonmothers, suggesting that they operate under a handicap in the labor market. The single mothers are clearly much more dependent on their families and society for financial support.

The effects of early parenthood on men are somewhat smaller. Early fathers lagged behind the other males in both educational attainment and educational aspirations. Also, there is some evidence that parenthood has a negative effect upon men's satisfaction with career progress. In general, however, the average effects of parenthood for men, beyond those associated with early marriage, are small for the measures we have studied.

Our findings on fertility indicate that most of the NLS participants planned on small families, and their actual family sizes in 1976 appear to confirm that their plans were realistic. On the other hand, there is some evidence that women who became mothers before graduation from high school will eventually have considerably larger families than their classmates.

We reiterate several qualifications, noted at the outset, deriving from the nature of the NLS data. Because the NLS excludes high school dropouts, our findings cannot be generalized to all teenagers. Also, the consequences that we have examined are necessarily restricted to the near term. Longer-term consequences, although possibly foreshadowed by some of our measures, will not be fully apparent until later in the respondents' lives. Finally, we note that these results apply to parenthood in the late teens and cannot be generalized to earlier parenthood.

Regardless of these qualifications, our findings have two important implications for how one should interpret the causal role of early parenthood. First, future studies that seek to assess the consequences of parenthood should attempt to measure preexisting differences as precisely as possible, since most differences in outcomes appear to be related to those differences. Second, the phenomenon of teenage parenthood should rightly be regarded as but one aspect of a broader process of early family formation, a process whose consequences do not depend entirely on reproduction.

Appendix A

DEFINITIONS OF DERIVED VARIABLES

This appendix lists the definitions of the outcome measures and independent variables used in the various analyses of this study. For the most part, the variables are defined in terms of responses to questionnaire items. In listing the questionnaire items the following abbreviations are used:

BQ = Base Year Questionnaire

FQ = First Year Follow-up Questionnaire

SQ = Second Year Follow-up Questionnaire

TQ = Third Year Follow-up Questionnaire

For example, FQ14 refers to Item 14 on the First Follow-up Questionnaire. The users' manual for the NLS file (Levinsohn et al., 1978) contains copies of the questionnaires, as well as counts of the responses to the items.

In some cases, the derived variables are defined in terms of created variables on the NLS file. The NLS variables (e.g., 'CRACE') are listed in single quotation marks to distinguishthem from the variables on this list. Missing values are coded "-9" throughout.

Variable Name	Short Label	Definition
ABLE	Ability composite score	'SCLGSC' + 'SCMATSC' + 'SCRDSC' + 'SCVOCSC' if all four scores are given, missing otherwise.
ACADEMIC	Academic or college preparatory program	1 if 'HSPGM' = 2, missing if 'HSPGM' > 3, 0 otherwise.
ATHOME73	Living with parents or relatives, 1973	1 if FQ4 = 2 or 4, missing if FQ4 > 5, 0 otherwise.
ATHOME74	Living with parents or relatives, 1974	1 if SQ3 = 2, 4, or 5, missing if SQ3 > 6, 0 otherwise.
ATHOME76	Living with parents or relatives, 1976	1 if TQ3 = 2, 4, or 5, missing if TQ3 > 6, 0 otherwise.
BLACK	Black, Afro-American, or Negro	1 if 'CRACE' = 2, missing if 'CRACE' > 8, 0 otherwise.
BURDEN73	Financially dependent on parents, friends, or relatives, 1973	2 - FQ9 if FQ9 < 3, missing otherwise.
BURDEN74	Financially dependent on parents, friends, or relatives, 1974	2 - SQ112 if SQ112 < 3, missing otherwise.
BURDEN76	Financially dependent on parents, friends, or relatives, 1976	1 if TQ140A = 1 or TQ140C = 1, missing if MIN(TQ140A, C) > 2, 0 otherwise.

Variable Name	Short Label	Definition
BUSY74	Multiple jobholder, 1974	SQ88 - 1 if 'ACT474' = 1 and SQ88 < 3, missing otherwise.
BUSY76	Multiple jobholder, 1976	TQ29 - 1 if 'ACT476' = 1 and TQ29 < 3, missing otherwise.
CARASP72	Career aspiration index, 1972	Recodes BQ25 as follows: BQ25: 1 2 3 4 5 6 7 CARASP72: 35 24 33 36 10 49 48 BQ25: 8 9 10 11 12 13 14 CARASP72: 15 70 42 31 38 25 40
CARASP73 CARASP74 CARASP76	Career aspiration indices, 1973-1976	Recodes FQ19. SQ142A, TQ44X as follows: RESPONSE: 1 2 3 4 5 6 7 8 CARASP: 35 24 33 36 10 49 48 15 RESPONSE: 9 10 11 12 13 14 15 16 CARASP: 64 80 42 31 38 63 25 40
CAREER76	Occupational index as of October 1976	Occupational index derived from census codes for occupations reported in TQ13. (See Note 1.)
CATHOLIC	Roman Catholic	1 if BQ92 = 2, missing if BQ92 > 6, 0 otherwise.
COMM72 COMM73 COMM74 COMM76	Orientation toward community, 1972, 1973, 1974, 1976	Same as 'COMM' variables on the NLS tape except that COMM74 and COMM76 are transformed to correct for scale inversion on 1974 and 1976 surveys.
DIVORC76	Divorced, widowed, or separated as of October 1976	1 if MAR76 = 3, missing if MAR76 = -9 or 4, 0 otherwise.
EDEXP72	Years of educational attainment expected, 1972	Recodes BQ29B as follows: BQ29B: 1 2 3 4 5 6 EDEXP72: 11 12 13 14 16 18
EDEXP73 EDEXP74 EDEXP76	Years of educational attainment expected, 1973, 1974, 1976	Recodes FQ14, SQ140, and TQ49B as follows: RESPONSE: 1 2 3 4 5 6 7 EDEXP: 12 13 14 14 16 18 20
EDGOT76	Years of educational attainment, 1976	Recodes TQ49A as follows: TQ49A: 1 2 3 4 5 6 7 8 EDGOT76: 12 13 14 13 14 16 18 20
EDMA	Mother's educational attainment	Recodes FQ78B as follows: FQ78B: 1 2 3 4 5 6 7 8 9 EDMA: 8 11 12 13 14 14 16 18 20
EDPA	Father's educational attainment	Same coding as for EDMA but uses FQ78A instead of FQ78B.
EDPLAN72	Plans to attend college following year, 1972	1 if BQ31 = 5, 6, 7, or 8, 0 otherwise.
EDPLAN73	Plans to attend college following year, 1973	2 - MIN(FQ16B, FQ16C) if MAX(FQ16A, B,. . ., F) > 3, missing otherwise.
EDPLAN74	Plans to attend college following year, 1974	1 if SQ139B = 2 or SQ139C = 3, 0 otherwise.
EDPLAN76	Plans to attend college following year, 1976	1 if TQ158CE = 3, TQ158DE = 4, or TQ158EE = 5, 0 otherwise.
ESTEEM72	Self-esteem, 1972,	Same as 'CONCPT' variables on the NLS tape

Variable Name	Short Label	Definition
ESTEEM73 ESTEEM74 ESTEEM76	1973, 1974, 1976	except the scale is inverted (ESTEEM = 6 - 'CONCPT') and missing values are recoded.
EXPECT76	Expect child between 10/76 and 10/77	1 if TQ138C = 2, missing if TQ138C > 6, 0 otherwise.
EXPMAR76	Indicates plans to marry, 1976	1 if TQ129 = 1 and MAR76 = 1, missing if TQ129 > 4 or MAR76 = -9, 0 otherwise.
EXPPAR76	Indicates first child expected, 1976	1 if TQ138C = 2 and NCHILD76 = 0, missing if TQ138C > 7 and MIN(NCHILD73, 74, 76) < 1, 0 otherwise.
FAM72 FAM73 FAM74 FAM76	Orientation toward family, 1972, 1973, 1974, 1976	Same as 'FAMILY' variables on NLS tape except that missing values are not estimated from partial responses and scores are corrected for scale inversion in 1974 and 1976.
FIRSTPAR	Timing of first child	1 if NCHILD73 > 0 2 if NCHILD73 = 0, NCHILD74 > 0 3 if NCHILD74 = 0, NCHILD76 > 0 4 if some NCHILD > 0, timing uncertain 5 if NCHILD73 = NCHILD74 = NCHILD76 = 0 (For coding specifications see Blaschke et al., 1976.)
FROLEA76	Attitudes toward male and female work roles, Measure A, 1976	Average of responses to TQ150B, D, F, H, and J recoded so that 1 = disagree strongly, 2 = disagree, 3 = agree, 4 = agree strongly; missing if any item is missing.
FROLEB76	Attitudes toward male and female work roles, Measure B, 1976	Same as FROLEA76 except that responses to TQ150C, E, G, and I are used.
HISPANIC	Mexican-American, Chicano, Puerto Rican, or other Latin-American origin	1 if 'CRACE' = 3, 4, or 5; missing if 'CRACE' > 8; 0 otherwise.
HOMASP72	Planning to be a homemaker in the future, 1972	1 if CARASP72 = 36, 0 otherwise.
HOMASP73 HOMASP74 HOMASP76	Planning to be a homemaker at age 30, 1973, 1974, 1976	Coded like HOMASP72 but using CARASP73, CARASP74, and CARASP76 instead of CARASP72.
HOME72	Homemaker status, 1972	2 - 'ACT672' if 'ACT672' < 3, missing otherwise.
HOME73 HOME74 HOME76	Homemaker status, 1973, 1974, 1976	Coded like HOME72 but using 'ACT673,' 'ACT674,' and 'ACT676' instead of 'ACT672.'
HOMPLAN72	Planning to be a homemaker next year, 1972	1 if BQ31 = 4 and MALE = 0, 0 otherwise.
HOMPLAN73	Planning to be a homemaker next year, 1973	(1 - MALE)*(2 - FQ16E) if MAX(FQ16A, B,. . ., F) < 3, missing otherwise.
HOMPLAN74	Planning to be a homemaker next year, 1974	1 if MALE = 0 and SQ139E = 5, 0 otherwise.
HOMPLAN76	Planning to be a homemaker next year, 1976	1 if MALE = 0 and TQ158GE = 7, 0 otherwise.
HRSWK74	Hours worked per week, 1974	SQ77 + BUSY74*SQ89. (See Note 2.)

Variable Name	Short Label	Definition
HRSWK76	Hours worked per week, 1976	TQ15 + BUSY76*TQ30. (See Note 2.)
INCOME75	Family income, 1975 (vector with six components)	(1) WAGES = TQ141AA; (2) SWAGES = TQ141BA if TQ129 = 3 or 4, 0 otherwise; (3) WELF = TQ141CA; (4) UNEMP = TQ141DA; (5) OTHER = TQ141EA; (6) TOTAL = sum of other five components. (See Note 3.)
INCOME76	Family income, 1976 (vector with six components)	Coded like INCOME75 but using TQ141AB, BB, CB, DB, and EB instead of TQ141AA, BA, CA, DA, and EA.
INDIAN	American Indian	1 if 'CRACE' = 1, missing if 'CRACE' > 8, 0 otherwise.
JEWISH	Jewish	1 if BQ92 = 4, missing if BQ92 > 6, 0 otherwise.
JOB72	Employment status indicator, 1972	2 - 'ACT472' if 'ACT472' < 3, missing otherwise.
JOB73 JOB74 JOB76	Employment status indicators, 1973, 1974, 1976	Coded like JOB72 but using 'ACT473,' 'ACT474,' and 'ACT476' instead of 'ACT472.'
JOBPLAN72	Planning to be employed following year, 1972	1 if BQ31 = 1, 2, 3, or 9, 0 otherwise.
JOBPLAN73	Planning to be employed following year, 1973	2 - MIN(FQ16A, FQ16D) if MAX(FQ16A, B, . . ., F) < 3, missing otherwise.
JOBPLAN74	Planning to be employed following year, 1974	1 if SQ139A = 1 or SQ139D = 4, 0 otherwise.
JOBPLAN76	Planning to be employed following year, 1976	1 if TQ158AE = 1, TQ158BE = 2, or TQ158FE = 6, 0 otherwise.
JOBSAT76	Satisfaction with career progress, 1976	TQ46 recoded so that 1 = very dissatisfied, 2 = dissatisfied, 3 = satisfied, 4 = very satisfied.
KIDS276	Indicates parents of two or more children, 1976	1 if NCHILD76 > 1, missing if NCHILD76 = -9, 0 otherwise.
KIDX74	Expected number of children, 1973	Same as FQ18 except for missing values.
KIDX76	Expected number of children, 1976	Same as TQ138A except for missing values.
LNFAMINC	Logarithm of family income	Natural logarithm of before-tax family income as reported in BQ93. Uses the midpoints of intervals except for lowest interval ($2360 instead of $1500) and highest interval ($23,900).
LOCUS72 LOCUS73 LOCUS74 LOCUS76	Locus of control, 1972, 1973, 1974, 1976	Same as 'LOCUS' variables on the NLS tape except for missing values.
MALE	Male indicator	2 - 'CSEX'
MAHOME	Mother's homemaker status	1 if BQ25C = 4, missing if BQ25C > 14, 0 otherwise.

Variable Name	Short Label	Definition
MAPROF	Mother's professional status	1 if BQ25C = 6, missing if BQ25C > 14, 0 otherwise.
MAR76	Marital status as of October 1976	1 = single; 2 = married; 3 = divorced; 4 = once married, current status unknown. (For coding specifications see Blaschke et al., 1976.)
MARDUR	Duration of marriage	Months from date of first marriage to October 1976.
NCHILD73 NCHILD74 NCHILD76	Number of children as of October 1973, 1974, 1976	0 = none, . . ., 6 = six or more, -9 = unknown. (For coding specifications see Blaschke et al., 1976.)
NEAST	Northeast	1 if 'REGION' = 1, 0 otherwise.
NOMORE76	Expecting no more children after 10/76	1 if TQ138C = 1, missing if TQ138C > 6, 0 otherwise.
ORIENTAL	Oriental or Asian-American	1 if 'CRACE' = 6, missing if 'CRACE' > 8, 0 otherwise.
OTHER	Other minority	1 if 'CRACE' = 8, missing if 'CRACE' > 8, 0 otherwise.
PALSCOLL	College plans of close friends	1 if BQ16 = 4, missing if BQ16 > 8, 0 otherwise.
PAYHR74	Hourly pay, 1974	PAYWK74 / HRSWK74. (See Note 2.)
PAYHR76	Hourly pay, 1976	PAYWK76 / HRSWK76. (See Note 2.)
PAYWK74	Weekly wages, 1974	SQ78 + BUSY74*SQ90. (See Note 2.)
PAYWK76	Weekly wages, 1976	TQ16 + BUSY76*TQ31. (See Note 2.)
PROASP72	Planning a professional career, 1972	1 if CARASP72 > 60, 0 otherwise.
PROASP73 PROASP74 PROASP76	Planning a professional career, 1973, 1974, 1976	Coded like PROASP72 but using CARASP73, CARASP74, and CARASP76 instead of CARASP72.
RANK	Percentile rank in class	Same as 'SRIFPRK' except 0 is recoded to 1, and missing values are recoded.
SEIFAOCP	Duncan SEI score of father's occupation	Same as 'SEIFAOCP' except for missing values.
SIBS	Number of siblings	MIN(SQ119A + SQ119B + SQ120A + SQ120B, 5) if all items are complete, missing otherwise.
SIBSCOLL	Number of siblings in college, 1972	Same as BQ87 except for missing values.
SOUTH	South	1 if 'REGION' = 3, 0 otherwise.
STUDY72	Enrollment status, 1972	2 - 'ACT172' if 'ACT172' < 3, missing otherwise.
STUDY73 STUDY74 STUDY76	Enrollment status, 1973, 1974, 1976	Coded like STUDY72 but using 'ACT173,' 'ACT174,' and 'ACT176' instead of 'ACT172.'
TIMEPAR	Vector of three indicator variables for timing of first child	Kth component = 1 if FIRSTPAR = K, missing if FIRSTPAR = 4, 0 otherwise.
VOCTECH	Vocational-technical program	1 if 'HSPGM' = 3, missing if 'HSPGM' > 3, 0 otherwise.
WED76	Indicates married as of October 1976	1 if MAR76 = 2, missing if MAR76 = 4 or missing, 0 otherwise.

Variable Name	Short Label	Definition
WELFAR75	Receiving public assistance or welfare, 1975	1 if 0 < TQ141CA < 10000, 0 if TQ141CA = 0, missing otherwise.
WELFAR76	Receiving public assistance or welfare, 1976	1 if 0 < TQ141CB < 10000, 0 if TQ141CB = 0, missing otherwise.
WELOFF74	Perceived economic well-being, 1974	SQ115 recoded so that 1 = very dissatisfied, . . ., 5 = very satisfied.
WEST	West	1 if 'REGION' = 4, 0 otherwise.
WORK72	Orientation toward work, 1972, 1973, 1974, 1976	Same as 'WORK' variables on the NLS tape except that WORK74 and WORK76 are transformed to correct for scale inversion on 1974 and 1976 surveys.

NOTES:

1. The value of CAREER76 is obtained by first classifying the census code for the NLS participant's occupation into categories (clerical, craftsman, etc.) and then assigning the value of the career aspiration index to that category. Missing occupation codes were replaced by 992 for military personnel and by 987 for homemakers. The following assignment of census codes to occupational categories was used: Clerical: 301-395; Craftsman: 401-580; Farmer: 801-802; Homemaker: 987; Laborer: 740-785, 821-824; Manager: 201-240; Military: 992; Operative: 601-715; Professional II: 1-2, 6-26, 32-33, 55-56, 74-76, 100-101, 175-195; Professional I: 30-31, 34-54, 61-73, 86-9o, 102-140; Proprietor: 245; Protective Service: 960-965; Sales: 260-285; Schoolteacher: 141-145; Service: 901-954, 980-984; Technical: 3-5, 80-85, 150-174. This categorization is a refinement of the Bureau of Census categorization reported by John A. Priebe, Joan Heinkel, and Stanley Greene in *1970 Occupational and Industry Classification Systems in Terms of Their 1960 Occupation and Industry Elements*, Technical Paper No. 26, U.S. Bureau of Census, Government Printing Office, Washington, D.C., 1972.

2. The variables HRSWK74, PAYWK74, and PAYHR74 are defined to be missing unless (a) 'ACT474' = 1, (b) 0 < SQ77 < 100, (c) SQ78 < 50*SQ77, (d) BUSY74 = 0 or (BUSY74 = 1 and SQ89 < 60 and SQ77 + SQ89 < 100 and SQ90 < 50*SQ89). Similar conditions are used in defining HRSWK76, PAYWK76, and PAYHR76 from 'ACT476,' TQ15, TQ16, BUSY76, TQ30, and TQ31.

3. All components are defined to be missing unless all items are complete and within ranges specified as follows: WAGES < 75,000; SWAGES < 75,000; WELF < 7,500; UNEMP < 7;500; OTHER < 75,000; TOTAL < 100,000.

Appendix B

A MODEL FOR ESTIMATING THE INDIVIDUAL EFFECTS OF EARLY FAMILY FORMATION FROM LONGITUDINAL DATA

This appendix summarizes the "individual effects" methodology that is used in this study to analyze the effects of early family formation on the educational, vocational, and personal development of the high school graduates in 1972 who participated in the NLS. The methodology applies to situations in which individual measures of growth are available at several points in time, and the aim is to determine how growth curves for individuals or groups of individuals are affected by "treatments" after allowing for differences in personal characteristics and background factors. Here, the measures of growth are the outcome measures listed in Table 3.1; the treatment groups are the various marital/parenthood categories defined in Sec. IV.

The individual effects methodology for analyzing longitudinal data is a variant of multivariate analysis of covariance in which certain commonly adopted assumptions about the pattern of the treatment effects are relaxed, thereby providing an analysis that is relatively free of stringent assumptions. The technique leads to simple procedures for estimating average effects for groups of individuals; these procedures are well suited for application to very large data sets and are readily adapted to handle missing values.

The main difference between individual effects models and ordinary analysis of covariance models is the assumption that the treatment effects are unpatterned and may vary widely from person to person, depending on a multitude of factors, many of which are unmeasured or unknown. The methodology depends upon having measures on the treated individuals both before and after the treatment, as well as analogous measures on individuals in a comparison (or "control") group with similar characteristics. The basic idea is that the effects of, say, early parenthood on a young mother's educational aspirations can be estimated by comparing the change in the mother's aspirations before and after she gave birth with the estimated change among individuals in the control group having similar attributes. For the purposes of this study, two control groups were chosen for gauging the effects of early family formation: (1) the single nonparents as of October 1976, and (2) the nonparents in October 1976 who married before October 1973.

To make the notions above more precise, let $Y = (Y_1, Y_2, ..., Y_k)$ denote a vector of outcome measures on an individual at k points in time; for simplicity,

the time points will be specified by the values $t = 1, 2, ..., k$. Assuming that each of the measures Y_t contains a random error of measurement e_t with $E(e_t) = 0$, we define the vector $\eta = (\eta_1, ..., \eta_k)$ of "true" responses corresponding to Y by

$$\eta = E(Y) = Y - e,$$

where $e = (e_1, ..., e_k)$. If Y_1 is measured before treatment and the other components are measured after treatment, then the change (or "gain") in the true response through time t is $g(t) = \eta_t - \eta_1$. An unbiased estimator of this change is the corresponding "gain score" $G(t) = Y_t - Y_1$.

The gain $g(t)$ in the outcome measures through time t may not be due to the treatment itself but to other factors, such as natural growth, changes in the metric for the outcome measures, and other intertemporal effects. To allow for these other factors in defining the treatment effect, we assume that we have vectors of observations (X, Y) on both treated and untreated individuals, where X is a nonstochastic $1 \times p$ vector of baseline characteristics measured before treatment. Also, we assume that the components of X are suitably chosen so that the observations (X, Y) on individuals in the control group satisfy a linear model

$$Y = h(X) + e,$$

where $h(X) = (h_1(X), ..., h_k(X))$ is a vector-valued linear function of X :

$$h(X) = \alpha + X\beta .$$

Here, α and β are $1 \times k$ and $p \times k$ matrices of parameters, and e is a $1 \times k$ vector of errors with mean zero. Under these assumptions, the expected change in the outcome measures for an individual in the control group with characteristics X is

$$E(Y_t - Y_1 \mid X) = h_t(X) - h_1(X) = (\alpha_t - \alpha_1) + X(\beta_t - \beta_1) ,$$

where β_t is the t^{th} column of β .

In this notation, the effect of the treatment through time t upon an individual with characteristics X is defined to be

$$\Delta_t = g(t) - [h_t(X) - h_1(X)] ,$$

i.e., the gain in the outcome measure minus the expected gain for individuals in the control group having the same characteristics. Under the above assumptions, the difference in expected outcomes between the treatment and control groups for an individual with characteristics X is the $1 \times k$ vector

$$\delta = \eta - h(X) .$$

In terms of δ, the treatment effect through time t is given by

$$\Delta_t = \delta_t - \delta_{t-1} .$$

Thus far, our assumptions about the observations (X, Y) can be summarized as follows:

Control group: $Y = h(X) + e = \alpha + X\beta + e$

Treatment group: $Y = \eta + e = \delta + h(X) + e$

Since the vector η is unrestricted in this formulation, it is free to vary widely and unsystematically from individual to individual, as are the treatment effects. While this model may seem unduly unstructured to analysis of covariance practitioners, it embodies the common belief that early family formation can have markedly different effects on two individuals with like characteristics. Also, whereas the model may seem unwieldy and overparameterized by comparison with standard analysis of covariance models, it leads to tractable procedures for estimating the average effect for individuals in certain categories or "treatment groups."

Although we are not interested in estimating the individual effects in this study, the methodology below provides a means for doing so. Given estimates of the individual effects for a sample of persons in the same treatment group, one can estimate the average effect for the group by simply averaging the estimates of the individual effects. However, this two-stage procedure requires considerable computation in large data sets. To short-cut this procedure, formulas for the average effect are provided below that are similar to analysis of covariance formulas for estimates of treatment effects and do not entail estimating the individual effects.

We pause to acknowledge that the above definition of treatment effects is somewhat arbitrary. Here are some alternatives that were considered:

1. The individual effect of the treatment through time t could have been defined as the gain g(t) in the outcome measure. Although this definition would not allow for natural growth in the outcome measure and other intertemporal factors unrelated to the treatment, this is a legitimate definition. In this case, an estimate of the average effect for individuals in some group is the mean gain score for that group.

2. The individual effect of the treatment through time t could have been defined as δ_t, the t^{th} component of δ, rather than Δ_t. In the absence of a pretreatment score Y_1, it is common to refer to the differences from the control group as "effects," even though the differences may be entirely due to preexisting differences on the outcome measure. Also, in this study, there is some

basis for arguing that δ_1, the base year difference, represents an "anticipatory effect" of the treatment (say adolescent parenthood) or an effect resulting from plans to undertake the treatment. Since there is no basis for ruling out the δ_i's as effects, and these parameters are of interest for their own sake (especially δ_1), we shall simply call these parameters "nominal effects" to distinguish them from the "real effects" Δ_i.

3. We have implicitly excluded the pretreatment measure Y_1 from the vector of baseline characteristics X, but some would prefer that the pretreatment measure be included as a covariate in analyzing the posttreatment outcome measures. Although including Y_1 as one of the components of X would not invalidate the above formulation (it would imply that $\delta_1 = 0$ and $\Delta_i = \delta_i$), we recommend against this practice. Lord (1967) and Campbell and Erlebacher (1970) have pointed out that such a procedure can lead to regression artifacts in comparing treatments based upon quasi-experimental data.

4. The individual effects could have been treated as random rather than fixed effects. Here, we were led by the computational simplicity of the procedures under the fixed effects model and the lack of any basis for assuming that the NLS respondents in the various categories were randomly drawn from the population of interest. For a general discussion of the considerations behind the choice of fixed or random effects models, see Searle (1971, Chap. 9).

Next, consider the problem of estimating the treatment effects based upon observations of outcome measures Y from several groups of individuals:

Control group: $Y_{11}, Y_{12}, \ldots, Y_{1n_1}$

Treatment groups: $Y_{21}, Y_{22}, \ldots, Y_{2n_2}$

$\ldots$

$Y_{I1}, Y_{I2}, \ldots, Y_{In_I}$

Associated with each $1 \times k$ vector of observations Y_{ij} is a $1 \times p$ vector of characteristics X_{ij} having components that are deemed suitable for predicting the vectors Y_{ij} in the absence of the treatments.

Adopting the individual effects formulation above, we hypothesize the following model:

$$Y_{1j} = \alpha + X_{1j}\beta + e_{1j} \tag{1}$$

$$Y_{ij} = \eta_{ij} + e_{ij} \qquad \text{for} \qquad i = 2, 3, \ldots, I.$$

The $1 \times k$ vector of nominal treatment effects (or differences) for the j^{th} individual in the i^{th} treatment group is defined by

$$\delta_{ij} = \eta_{ij} - (\alpha + X_{ij}\beta) \tag{2}$$

Alternatively, the model (1) can be specified in the form

$$Y_{ij} = \delta_{ij} + \alpha + X_{ij}\beta + e_{ij}\,, \tag{3}$$

where $\delta_{i1} = 0$ for all j.

The treatment effects corresponding to Y_{ij} are defined by

$$\Delta_{ijt} = \delta_{ijt} - \delta_{ij1} \qquad \text{for } t = 2, 3, \ldots, k\,. \tag{4}$$

To simplify notation below, we shall assume that $k = 2$ throughout, so that each observation $Y_{ij} = (Y_{ij1}, Y_{ij2})$ consists of a single pretreatment and post-treatment measure. In this case, we can abbreviate Δ_{ij2} to Δ_{ij} without ambiguity.

The model makes no assumptions whatsoever about the pattern of the differences δ_{ij} for the treated individuals. By contrast, the usual analysis of covariance model for comparing treatments can be parameterized in the form

$$Y_{ij} = \delta_i + \alpha + X_{ij}\beta + e_{ij}\,, \tag{5}$$

where $\delta_1 = 0$. This amounts to assuming that the treatment effect is the same for all individuals in the same treatment group. Estimation procedures for models (3) and (5) will be compared below.

A third alternative that will be considered stems from the assumption that the means η_{ij} are linear functions of the X_{ij}'s within each group, but the regression coefficients differ from group to group as follows:

$$Y_{ij} = \alpha_i + X_{ij}\beta_i + e_{ij}\,. \tag{6}$$

In this case, the nominal effect for the j^{th} individual in the i^{th} treatment group relative to the control group would be defined by

$$\delta_{ij} = \eta_{ij} - (\alpha_1 + X_{ij}\beta_1) = (\alpha_i + X_{ij}\beta_i) - (\alpha_1 + X_{ij}\beta_1)\,. \tag{7}$$

In either of the cases (2) and (7), the average of the nominal effects for individuals in the i^{th} group are the coordinates of

$$\delta_{i.} = \Sigma_{j=1}^{n_i} \delta_{ij} / n_i\,, \tag{8}$$

and the average treatment effect in the i^{th} group is

$$\Delta_{i.} = \delta_{i.2} - \delta_{i.1}\,. \tag{9}$$

Under the assumption that the errors e_{ij} are independent random vectors with mean zero and covariance matrix Σ, the best linear unbiased estimators (BLUEs) of the parameters of the models (3) and (6) are obtained by using the least-squares estimators for each coordinate of Y. This is an implication of the multivariate analogue of the Gauss-Markov Theorem. See Timm (1975, p. 187). Thus, under the individual effects model (3), the BLUEs of the parameters δ_{ijt}, α_t, and β_t are the values that minimize

$$\sum_i \sum_j (Y_{ijt} - \delta_{ijt} - \alpha_t - X_{ij}\beta_t)^2 .$$

Here, we are implicitly assuming that there are no missing values, a ubiquitous problem throughout this study that will be discussed later. In the case that the data are complete, it follows readily from a consideration of the least-squares criterion that the BLUEs can be obtained using the following three-stage procedure:

(a) Estimate the parameters α and β using the least-squares estimators $\hat{\alpha}$ and $\hat{\beta}$ based upon the control group observations only.

(b) Predict the responses Y_{ij} for the treated individuals *ignoring the possible treatment effects*, using

$$\tilde{Y}_{ij} = \hat{\alpha} + X_{ij}\hat{\beta} . \tag{10}$$

(c) Estimate the nominal effects using

$$\hat{\delta}_{ij} = Y_{ij} - \tilde{Y}_{ij} . \tag{11}$$

It then follows from the Gauss-Markov Theorem that the BLUEs of the average nominal effects are

$$\hat{\delta}_{i.} = \sum_{j=1}^{n_i} \hat{\delta}_{ij} / n_i . \tag{12}$$

Since the average treatment effects are linear functions of the nominal effects, it follows from (9) that the BLUEs of the average treatment effects are given by

$$\hat{\Delta}_{i.} = \hat{\delta}_{i.2} - \hat{\delta}_{i.1} . \tag{13}$$

For the purposes of this study, we have chosen to report estimates of the average nominal effects $\hat{\delta}_{i.}$ throughout (referred to in the tables as the "adjusted intergroup differences"). Since the corresponding BLUEs of the average treatment effects are readily obtained by differencing the average nominal effects, these estimates have not been reported.

Alternatively, the BLUEs of the average treatment effects could have been obtained (from complete data) by applying an individual effects model to the

gain scores $G_{ij}(t) = Y_{ij} - Y_{ij1}$. We have not chosen to do so for several reasons: (a) the prevalence of missing values in the NLS, especially in the base year survey, would lead to discarding a sizable proportion of the cases for which the gain scores could not be calculated; (b) the estimates of the average treatment effects are readily obtained from the adjusted intergroup differences; (c) there is considerable interest associated with the pretreatment differences and in comparing these differences with posttreatment differences; and (d) it is computationally more convenient to handle the pretreatment measures in the same way that the posttreatment measures are handled.

In large data sets or in the case of missing values, it is not feasible to evaluate the estimates of the average effects using the three-stage procedure outlined above. To obtain simpler formulas comparable to those used in analysis of covariance, let $\bar{Y}_i$ denote the mean of the outcome vectors in the i^{th} group and let $\bar{X}_i$ denote the corresponding mean vector of the X_{ij}'s. Since

$$\hat{\delta}_{ij} = Y_{ij} - \hat{\alpha} - X_{ij}\hat{\beta} = (Y_{ij} - \bar{Y}_1) - (X_{ij} - \bar{X}_1)\hat{\beta}, \qquad (14)$$

it follows that

$$\hat{\delta}_{i.} = (\bar{Y}_i - \bar{Y}_1) - (\bar{X}_i - \bar{X}_1)\hat{\beta}. \qquad (15)$$

This is the formula that was actually used in the calculations, where the means and regression coefficients were estimated from the incomplete data. The means, variances, and correlations needed to compute the regression coefficients $\hat{\beta}$ were estimated separately by sex from the control group observations using the CORPAIR method described in *BMDP Biomedical Computer Programs, P-series*, University of California Press, 1979, Chap. 12.

It is interesting to compare the estimators in (15) with the estimators derived under alternative assumptions. The corresponding analysis of covariance formula for the model specified by (5) is like (15) except that the vector of regression coefficients $\hat{\beta}$ computed from the control group observations is replaced by the pooled estimator of β across the control and treatment groups. In cases where the mean vectors $\bar{X}_i$ differ considerably and the within-group regression coefficients also differ, the analysis of covariance formula can lead to considerable bias in estimating the average treatment effects.

Instead of assuming that the individual treatment effects are completely unpatterned, one may want to make the assumptions implicit in the "heterogeneous slopes" model (6) in which the observations within each group are assumed to satisfy a linear model, but the regression coefficients are permitted to differ across groups. In the latter case, it can be shown that the BLUEs of the average effects defined by (7) and (8) are exactly the same as in (15). That is, the estimates of the average nominal effects as well as the average treatment effects are exactly the same whether one adopts the individual effects model or the heterogeneous slopes model. However, the estimates of the residual variances (i.e., the diagonal elements of Σ) are different in the two models, leading to different t-statistics and standard errors for the regression coefficients.

In deriving formulas for the standard errors of the "adjusted means" and the average nominal effects, we can assume that each vector Y_i consists of just a single outcome measure, in which case the covariance matrix Σ reduces to a single element σ^2. The residual sum of squares SS_e for estimating σ^2 in the individual effects model (3) is the residual sum of squares for the control group only. In the case of missing data, SS_e can be estimated using the formula

$$SS_e = n_1(1 - R^2)s_y^2 , \tag{16}$$

where s_y^2 is the sample variance of Y in the control group, and R is the multiple correlation coefficient of Y with the components of X. Except for the calculation of the means $\bar{Y}_1$ and $\bar{X}_1$, all calculations are performed on the control group observations only; this leads to substantial computational savings in analyzing large data sets, especially when missing-values techniques are required. By contrast, the residual sum of squares for the model (6) is the pooled residual sum of squares over all treatment groups, which requires separate regression calculations for each group. Thus, although models (3) and (6) yield the same estimates of the average treatment effects, the less restrictive model (3) leads to simpler calculations.

The adjusted means reported in several tables in this study are analogous to the adjusted means often reported in conjunction with analysis of covariance. They are defined by

$$\tilde{Y}_i = \bar{Y}_i + (\bar{X}_1 - \bar{X}_i)\hat{\beta} . \tag{17}$$

The variances of these adjusted means are given by

$$\mathrm{Var}(\tilde{Y}_i) = (\delta^2/n_i) + (\bar{X}_1 - \bar{X}_i)\ \Sigma_{\hat{\beta}}\ (\bar{X}_1 - \bar{X}_i)' , \tag{18}$$

so that the standard errors of the adjusted means can be calculated from

$$\mathrm{s.e.}(\tilde{Y}_i) = [(S^2/n_i) + (\bar{X}_1 - \bar{X}_i)\ \hat{\Sigma}_{\hat{\beta}}\ (\bar{X}_1 - \bar{X}_i)']^{1/2} , \tag{19}$$

where S^2 and $\hat{\Sigma}_{\hat{\beta}}$ are the usual unbiased estimators of σ^2 and $\Sigma_{\hat{\beta}}$. Note that formulas (17) to (19) also apply when $i = 1$, the control group index.

To obtain formulas for the standard errors of the estimated average nominal effects, we note that $\hat{\delta}_{i.} = \tilde{Y}_i - \tilde{Y}_1$ and use the fact that $\tilde{Y}_1$ and $\tilde{Y}_i$ are uncorrelated to obtain that

$$\mathrm{Var}(\hat{\delta}_{i.}) = \mathrm{Var}(\tilde{Y}_i) + \mathrm{Var}(\tilde{Y}_1) \quad \text{for } i > 1 , \tag{20}$$

implying that

$$[\mathrm{s.e.}(\hat{\delta}_{i.})]^2 = [\mathrm{s.e.}(\tilde{Y}_i)]^2 + [\mathrm{s.e.}(\tilde{Y}_1)]^2 . \tag{21}$$

Thus, given the adjusted means and their standard errors, one can immediately derive the $\hat{\delta}_i$'s and their standard errors.

Returning to the case that each Y_{ij} consists of two measures (pretreatment and posttreatment), consider estimating the average treatment effect for the i^{th} group using

$$\hat{\Delta}_{i.} = \hat{\delta}_{i.2} - \hat{\delta}_{i.1} . \tag{22}$$

Since

$$\text{Var}(\hat{\Delta}_{i.}) = \text{Var}(\hat{\delta}_{i.2}) + \text{Var}(\hat{\delta}_{i.1}) - 2\,\text{Cov}(\hat{\delta}_{i.1}, \hat{\delta}_{i.2}) \tag{23}$$

and since the covariance on the right will tend to be positive (assuming the individual outcomes are positively correlated), an approximation for the standard error that will ordinarily serve as an upper bound is

$$[\text{s.e.}(\Delta_{i.})]^2 \tilde{=} [\text{s.e.}(\delta_{i.1})]^2 + [\text{s.e.}(\delta_{i.2})]^2 . \tag{24}$$

Thus, the average treatment effects and (bounds for) their standard errors are easily calculated from the tables reporting the intergroup differences in the adjusted means.

In the event that the vectors of outcome variables Y_{ij} have dichotomous components, the above methodology requires numerous modifications. For any pair (X, Y) in the control group, we assume that $Y_t \sim$ Bernoulli $[f_t(X)]$ where

$$f_t(X) = P(Y_t = 1) = 1/[1 + \exp -(\alpha + X\beta)] . \tag{25}$$

To facilitate the discussion below, we shall assume that Y consists of a single component and drop the subscripts t.

Suppose that the effect of the i^{th} treatment is to change $P(Y = 1)$ from its value $f(X)$ in the control group to $p_i(X)$, where $p_i(X)$ is the regression function for the i^{th} group. Then the nominal effect for the j^{th} individual in the i^{th} group can be defined as

$$\delta_{ij} = p_i(X_{ij}) - f(X_{ij}) . \tag{26}$$

The problem is to estimate the average nominal effect defined by

$$\delta_{i.} = \Sigma_{j=1}^{n_i} [p_i(X_{ij}) - f(X_{ij})] / n_i . \tag{27}$$

To simplify notation below, we consider the case in which there is only a single treatment group and drop the subscript i.

If f were known, an unbiased estimator of δ would be $\bar{Y}_2 - \Sigma f(X_j)/n_2$. In this study, we considered estimating δ using

$$\hat{\delta} = \bar{Y}_2 - \Sigma\, \hat{f}(X_j)/n_2 \,, \tag{28}$$

where $\hat{f}(x)$ is the estimated regression function for the control group, i.e.,

$$\hat{f}(x) = 1/[1 + \exp - (\hat{\alpha} + X\hat{\beta})] \,, \tag{29}$$

where $\hat{\alpha}$ and $\hat{\beta}$ are the discriminant function estimates of α and β. (The reason for using the discriminant function estimates is that they are readily adapted to the missing values case.)

Unfortunately, the second term on the right in (28) is not well suited for handling missing values. After investigating a number of approximations to (28) in complete data sets, we adopted

$$\hat{\delta} = \bar{Y}_2 - \hat{f}(\bar{X}_2) \tag{30}$$

The standard error of this estimator can be approximated using

$$\text{s.e.}(\hat{\delta}) = [\bar{Y}_2(1 - \bar{Y}_2) / (n_2 - 1) + \bar{Y}_1(1 - \bar{Y}_1) / (n_1 - 1) \tag{31}$$

$$+ (\bar{X}_2 - \bar{X}_1)\, \hat{\Sigma}_b (\bar{X}_2 - \bar{X}_1)\,']^{1/2}$$

where $\hat{\Sigma}_b$ is the estimated covariance matrix of b that results from fitting a linear equation to the control group observations.

The adjusted means for the dichotomous case are defined by

$$\tilde{Y}_i = \bar{Y}_i + \bar{Y}_1 - f(X_i) \qquad \text{for } i = 2, 3, \ldots, I. \tag{32}$$

$$\tilde{Y}_1 = \bar{Y}_1$$

The corresponding standard errors of the adjusted means can be calculated from

$$\text{s.e.}(\tilde{Y}_i) = [\bar{Y}_i(1 - \bar{Y}_i) / (n_i - 1) + (\bar{X}_i - \bar{X}_1)\hat{\Sigma}_b(\bar{X}_i - \bar{X}_1)']^{1/2}. \tag{33}$$

With these changes, the calculations for the dichotomous case become similar to those for the continuous case.

Appendix C

MEANS OF BACKGROUND FACTORS BY MARITAL AND PARENTHOOD STATUS

A. Race/Ethnicity Classification

Parenthood Status as of October 1976	Race/Ethnicity Classification				
	American Indian	Black	Hispanic	Oriental	Other Minority
SINGLE FEMALES					
Nonparents	0.008	0.145	0.035	0.018	0.025
Parents	0.023	0.705	0.033	0.000	0.014
After 10/74	0.024	0.604	0.059	0.000	0.012
11/73-10/74	0.034	0.748	0.007	0.000	0.007
Before 10/73	0.009	0.802	0.027	0.000	0.027
Prob. 6/72-10/73	0.015	0.758	0.030	0.000	0.045
Prob. before 6/72	0.000	0.867	0.022	0.000	0.000
EVER MARRIED FEMALES					
Nonparents	0.007	0.064	0.037	0.005	0.022
Parents	0.014	0.175	0.057	0.005	0.027
After 10/74	0.014	0.112	0.052	0.005	0.024
11/73-10/74	0.012	0 187	0.079	0.007	0.040
Before 10/73	0.017	0.259	0.046	0.003	0.018
Prob. 6/72-10/73	0.017	0.217	0.040	0.002	0.019
Prob. before 6/72	0.018	0.357	0.062	0.004	0.018
TIMING OF FIRST MARRIAGE:					
After 10/74					
Nonparents	0.005	0.066	0.034	0.008	0.024
Parents	0.017	0.236	0.066	0.006	0.031
11/73 to 10/74					
Nonparents	0.008	0.060	0.040	0.005	0.019
Parents	0.013	0.206	0.055	0.002	0.023
6/72 to 10/73					
Nonparents	0.007	0.062	0.040	0.000	0.018
Parents	0.013	0.145	0.054	0.006	0.030
Before 6/72					
Nonparents	0.032	0.074	0.043	0.011	0.032
Parents	0.016	0.182	0.062	0.003	0.016
SINGLE MALES					
Nonparents	0.009	0.099	0.037	0.020	0.023
Parents	0.017	0.640	0.033	0.000	0.021
After 10/74	0.022	0.622	0.044	0.000	0.015
11/73-10/74	0.012	0.662	0.012	0.000	0.012
Before 10/73	0.000	0.667	0.042	0.000	0.083
EVER MARRIED MALES					
Nonparents	0.010	0.056	0.043	0.003	0.026
Parents	0.021	0.177	0.067	0.005	0.032
After 10/74	0.015	0.133	0.058	0.005	0.035
11/73-10/74	0.021	0.231	0.064	0.008	0.015
Before 10/73	0.024	0.219	0.096	0.000	0.039
Prob. 6/72-10/73	0.027	0.218	0.093	0.000	0.023
Prob. before 6/72	0.013	0.224	0.105	0.000	0.092
TIMING OF FIRST MARRIAGE:					
After 10/74					
Nonparents	0.011	0.063	0.039	0.003	0.028
Parents	0.008	0.245	0.072	0.003	0.034
11/73 to 10/74					
Nonparents	0.009	0.040	0.044	0.005	0.021
Parents	0.020	0.179	0.058	0.013	0.027
6/72 to 10/73					
Nonparents	0.007	0.049	0.056	0.003	0.028
Parents	0.029	0.142	0.063	0.001	0.024
Before 6/72					
Nonparents	0.000	0.000	0.100	0.000	0.000
Parents	0.022	0.148	0.104	0.000	0.081

Table C.1—continued

B. Region and Religion

Parenthood Status as of October 1976	Region			Religion	
	Northeast	South	West	Catholic	Jewish
SINGLE FEMALES					
Nonparents	0.270	0.308	0.167	0.329	0.040
Parents	0.166	0.503	0.138	0.168	0.000
After 10/74	0.158	0.450	0.170	0.208	0.000
11/73-10/74	0.156	0.544	0.122	0.141	0.000
Before 10/73	0.189	0.532	0.108	0.141	0.000
Prob. 6/72-10/73	0.152	0.530	0.106	0.105	0.000
Prob. before 6/72	0.244	0.533	0.111	0.190	0.000
EVER MARRIED FEMALES					
Nonparents	0.184	0.389	0.163	0.286	0.013
Parents	0.147	0.441	0.159	0.258	0.001
After 10/74	0.144	0.430	0.170	0.287	0.003
11/73-10/74	0.169	0.423	0.169	0.258	0.000
Before 10/73	0.141	0.466	0.133	0.218	0.000
Prob. 6/72-10/73	0.150	0.461	0.130	0.238	0.000
Prob. before 6/72	0.119	0.480	0.141	0.174	0.000
TIMING OF FIRST MARRIAGE:					
After 10/74					
Nonparents	0.225	0.322	0.158	0.321	0.020
Parents	0.154	0.350	0.208	0.315	0.006
11/73 to 10/74					
Nonparents	0.184	0.382	0.163	0.301	0.009
Parents	0.191	0.408	0.153	0.277	0.000
6/72 to 10/73					
Nonparents	0.113	0.488	0.182	0.220	0.003
Parents	0.143	0.435	0.158	0.264	0.001
Before 6/72					
Nonparents	0.096	0.702	0.096	0.136	0.000
Parents	0.089	0.600	0.119	0.163	0.000
SINGLE MALES					
Nonparents	0.236	0.302	0.189	0.335	0.035
Parents	0.172	0.506	0.138	0.165	0.010
After 10/74	0.215	0.452	0.133	0.178	0.008
11/73-10/74	0.125	0.563	0.137	0.134	0.015
Before 10/73	0.083	0.625	0.167	0.190	0.000
EVER MARRIED MALES					
Nonparents	0.149	0.402	0.163	0.274	0.009
Parents	0.126	0.471	0.163	0.231	0.004
After 10/74	0.118	0.484	0.159	0.232	0.005
11/73-10/74	0.126	0.462	0.174	0.206	0.000
Before 10/73	0.141	0.452	0.171	0.246	0.007
Prob. 6/72-10/73	0.128	0.461	0.163	0.227	0.009
Prob. before 6/72	0.184	0.421	0.197	0.306	0.000
TIMING OF FIRST MARRIAGE:					
After 10/74					
Nonparents	0.173	0.351	0.164	0.298	0.013
Parents	0.149	0.423	0.185	0.271	0.006
11/73 to 10/74					
Nonparents	0.119	0.452	0.166	0.245	0.003
Parents	0.132	0.492	0.136	0.236	0.005
6/72 to 10/73					
Nonparents	0.090	0.538	0.160	0.201	0.000
Parents	0.106	0.476	0.169	0.194	0.003
Before 6/72					
Nonparents	0.000	0.600	0.100	0.200	0.000
Parents	0.141	0.519	0.156	0.283	0.000

Table C.1—continued

C. Ability and High School Program

Parenthood Status as of October 1976	Ability		High School Program	
	Scholastic Aptitude	Rank in Class	Academic Program	Voc-tech Program
SINGLE FEMALES				
Nonparents	209.7	63.7	0.524	0.195
Parents	171.8	42.8	0.207	0.373
After 10/74	170.7	43.1	0.222	0.345
11/73-10/74	176.1	45.5	0.238	0.408
Before 10/73	166.9	38.8	0.144	0.369
Prob. 6/72-10/73	160.7	36.8	0.167	0.364
Prob. before 6/72	171.1	41.2	0.111	0.378
EVER MARRIED FEMALES				
Nonparents	204.0	61.2	0.361	0.298
Parents	189.5	51.2	0.194	0.369
After 10/74	194.6	54.9	0.230	0.358
11/73-10/74	185.1	48.6	0.166	0.387
Before 10/73	186.2	48.6	0.177	0.376
Prob. 6/72-10/73	189.7	48.8	0.182	0.380
Prob. before 6/72	179.7	48.1	0.164	0.367
TIMING OF FIRST MARRIAGE:				
After 10/74				
Nonparents	208.2	63.2	0.444	0.239
Parents	192.1	50.2	0.254	0.333
11/73 to 10/74				
Nonparents	203.5	61.0	0.338	0.296
Parents	169.3	51.1	0.202	0.350
6/72 to 10/73				
Nonparents	198.1	57.3	0.243	0.392
Parents	190.2	51.6	0.192	0.375
Before 6/72				
Nonparents	190.1	58.9	0.117	0.489
Parents	185.3	51.0	0.138	0.400
SINGLE MALES				
Nonparents	207.8	51.2	0.513	0.163
Parents	176.6	36.3	0.234	0.259
After 10/74	176.0	36.2	0.237	0.267
11/73-10/74	178.8	38.1	0.275	0.250
Before 10/73	172.8	31.6	0.083	0.250
EVER MARRIED MALES				
Nonparents	199.9	46.8	0.389	0.216
Parents	184.6	37.1	0.213	0.314
After 10/74	187.9	39.7	0.245	0.314
11/73-10/74	183.3	34.4	0.172	0.310
Before 10/73	179.6	34.2	0.189	0.314
Prob. 6/72-10/73	182.2	35.1	0.202	0.298
Prob. before 6/72	172.3	31.9	0.145	0.368
TIMING OF FIRST MARRIAGE:				
After 10/74				
Nonparents	202.3	49.0	0.429	0.194
Parents	185.3	40.1	0.280	0.306
11/73 to 10/74				
Nonparents	199.4	45.2	0.371	0.238
Parents	186.8	36.1	0.195	0.356
6/72 to 10/73				
Nonparents	189.9	38.7	0.240	0.268
Parents	184.7	37.1	0.198	0.281
Before 6/72				
Nonparents	207.9	36.1	0.400	0.300
Parents	175.0	32.1	0.156	0.378

Table C.1—continued

D. Socioeconomic Status

Parenthood Status as of October 1976	Socioeconomic Status					
	Father's Education	Mother's Education	Father's Occupation	Mother's Professional Status	Mother's Homemaker Status	Log of Family Income
SINGLE FEMALES						
Nonparents	12.9	12.6	44.4	0.143	0.532	9.219
Parents	11.1	11.3	27.2	0.067	0.594	8.656
After 10/74	11.2	11.2	26.1	0.070	0.662	8.655
11/73-10/74	11.1	11.3	27.6	0.048	0.571	8.725
Before 10/73	11.1	11.6	25.3	0.087	0.522	8.572
Prob. 6/72-10/73	10.8	11.4	22.9	0.050	0.600	8.542
Prob. before 6/72	11.4	11.8	29.3	0.115	0.462	8.615
EVER MARRIED FEMALES						
Nonparents	12.4	12.1	41.0	0.090	0.565	9.179
Parents	11.3	11.5	33.9	0.076	0.582	8.948
After 10/74	11.6	11.6	36.0	0.075	0.579	9.017
11/73-10/74	11.2	11.3	33.3	0.071	0.615	8.938
Before 10/73	11.1	11.4	31.4	0.090	0.547	8.870
Prob. 6/72-10/73	11.2	11.5	31.7	0.095	0.563	8.919
Prob. before 6/72	10.9	11.2	30.8	0.080	0.514	8.755
TIMING OF FIRST MARRIAGE:						
After 10/74						
Nonparents	12.6	12.3	43.0	0.098	0.559	9.222
Parents	11.7	11.8	34.6	0.079	0.571	8.948
11/73 to 10/74						
Nonparents	12.4	12.1	39.8	0.088	0.557	9.207
Parents	11.4	11.6	34.1	0.087	0.579	8.966
6/72 to 10/73						
Nonparents	12.0	11.8	39.4	0.080	0.579	9.111
Parents	11.3	11.5	34.1	0.069	0.593	8.965
Before 6/72						
Nonparents	11.6	11.7	31.3	0.058	0.596	8.899
Parents	10.9	11.1	32.5	0.086	0.554	8.863
SINGLE MALES						
Nonparents	12.9	12.5	43.8	0.123	0.546	9.297
Parents	11.4	11.7	34.4	0.067	0.490	8.875
After 10/74	11.5	11.7	33.0	0.077	0.492	8.817
11/73-10/74	11.6	11.7	38.8	0.033	0.500	8.889
Before 10/73	10.7	11.3	28.2	0.111	0 444	9.139
EVER MARRIED MALES						
Nonparents	12.3	12.1	40.3	0.103	0.555	9.224
Parents	11.4	11.5	33.2	0.076	0.588	9.032
After 10/74	11.6	11.7	34.4	0.083	0.600	9.055
11/73-10/74	11.2	11.3	31.3	0.048	0.619	9.010
Before 10/73	11.1	11.4	32.5	0.082	0.516	9.016
Prob. 6/72-10/73	11.2	11.4	32.5	0.068	0.517	9.061
Prob. before 6/72	10.8	11.2	32.5	0.122	0.512	8.860
TIMING OF FIRST MARRIAGE:						
After 10/74						
Nonparents	12.4	12.1	41.3	0.107	0.557	9.260
Parents	11.5	11.6	32.1	0.063	0.654	8.991
11/73 to 10/74						
Nonparents	12.3	12.0	39.7	0.098	0.568	9.205
Parents	11.6	11.6	33.3	0.098	0.603	9.030
6/72 to 10/73						
Nonparents	11.7	11.7	37.3	0.096	0.513	9.134
Parents	11.3	11.5	33.8	0.062	0.549	9.082
Before 6/72						
Nonparents	10.5	11.0	33.0	0.000	0.667	8.632
Parents	10.9	11.0	33.1	0.097	0.548	8.919

Table C.1—continued

E. Other Background Factors

Parenthood Status as of October 1976	Other Background Factors: Number of Siblings	Siblings in College	Friends' College Plans
	SINGLE FEMALES		
Nonparents	2.72	0.438	0.685
Parents	3.64	0.320	0.405
After 10/74	3.69	0.339	0.424
11/73-10/74	3.58	0.314	0.425
Before 10/73	3.65	0.301	0.347
Prob. 6/72-10/73	3.67	0.156	0.339
Prob. before 6/72	3.61	0.415	0.357
	EVER MARRIED FEMALES		
Nonparents	2.70	0.303	0.582
Parents	3.20	0.230	0.419
After 10/74	3.06	0.245	0.471
11/73-10/74	3.33	0.202	0.390
Before 10/73	3.28	0.230	0.373
Prob. 6/72-10/73	3.26	0.169	0.373
Prob. before 6/72	3.33	0.344	0.372
TIMING OF FIRST MARRIAGE:			
After 10/74			
Nonparents	2.64	0.331	0.653
Parents	3.13	0.257	0.506
11/73 to 10/74			
Nonparents	2.78	0.306	0.576
Parents	3.29	0.263	0.485
6/72 to 10/73			
Nonparents	2.72	0.251	0.473
Parents	3.20	0.215	0.385
Before 6/72			
Nonparents	3.02	0.254	0.372
Parents	3.14	0.217	0.363
	SINGLE MALES		
Nonparents	2.67	0.413	0.637
Parents	3.31	0.383	0.429
After 10/74	3.40	0.371	0.463
11/73-10/74	3.36	0.500	0.362
Before 10/73	2.63	0.063	0.455
	EVER MARRIED MALES		
Nonparents	2.74	0.284	0.523
Parents	3.21	0.243	0.343
After 10/74	3.11	0.289	0.369
11/73-10/74	3.30	0.236	0.311
Before 10/73	3.29	0.148	0.312
Prob. 6/72-10/73	3.24	0.110	0.342
Prob. before 6/72	3.49	0.259	0.211
TIMING OF FIRST MARRIAGE:			
After 10/74			
Nonparents	2.71	0.308	0.564
Parents	3.39	0.311	0.388
11/73 to 10/74			
Nonparents	2.76	0.245	0.513
Parents	3.21	0.283	0.362
6/72 to 10/73			
Nonparents	2.87	0.248	0.368
Parents	3.07	0.180	0.313
Before 6/72			
Nonparents	2.75	0.000	0.111
Parents	3.35	0.209	0.292

Appendix D

REGRESSION EQUATIONS FOR CALCULATING ADJUSTED MEANS

This appendix contains the regression equations used in calculating the adjusted means and intergroup differences reported in a number of tables in the text. The regressions were carried out separately by sex for two groups of NLS participants who remained childless through October 1976: (i) the never married nonparents; and (ii) the nonparents who married before October 1973. The procedure for using these equations to estimate the effects of early family formation is discussed in App. B.

Table D.1

Regression Results for Educational Attainment in 1976: Single Nonparents as of October 1976

Variable	1976 b	1976 t
FEMALES		
Constant	10.1	52.3
Race/Ethnicity		
Black	0.333	5.4
Hispanic	0.274	2.6
Indian	0.169	0.8
Oriental	0.086	0.6
Other minority	-0.014	-0.1
Region		
Northeast	0.038	0.7
South	0.155	3.1
West	-0.128	-2.2
High school measures		
Ability	0.0065	7.5
Percentile rank in class	0.0125	14.1
Academic program	0.440	9.2
Vocational-technical program	-0.398	-7.3
Family background		
Father's education	0.0291	3.2
Mother's education	0.0621	5.3
Father's occupation (SEI)	0.0012	1.2
Mother's professional status	0.024	0.4
Mother's homemaker status	0.074	1.8
Number of siblings	-0.078	-6.0
Number of siblings in college	0.108	3.9
Friends plan college	0.374	8.6
Catholic	-0.002	-0.1
Jewish	0.216	2.2
R^2	0.381	
S	1.178	
F	119.8	
N	4309	
MALES		
Constant	10.3	66.6
Race/Ethnicity		
Black	0.268	4.8
Hispanic	0.194	2.3
Indian	0.194	1.3
Oriental	0.203	1.9
Other minority	-0.016	-0.2
Region		
Northeast	0.065	1.5
South	0.048	1.2
West	-0.272	-6.0
High school measures		
Ability	0.0065	10.1
Percentile rank in class	0.0132	19.9
Academic program	0.357	9.5
Vocational-technical program	-0.073	-1.6
Family background		
Father's education	0.0221	2.9
Mother's education	0.0508	5.3
Father's occupation (SEI)	0.0014	1.7
Mother's professional status	-0.072	-1.4
Mother's homemaker status	0.082	2.5
Number of siblings	-0.100	-9.6
Number of siblings in college	0.137	6.1
Friends plan college	0.341	9.8
Catholic	0.061	1.8
Jewish	0.555	6.6
R^2	0.380	
S	1.101	
F	159.7	
N	5761	

Table D.2

Regression Results for Educational Attainment in 1976: Nonparents Married as of October 1973

Variable	1976 b	1976 t
FEMALES		
Constant	11.9	36.8
Race/Ethnicity		
Black	0.335	2.6
Hispanic	0.001	0.0
Region		
Northeast	-0.067	-0.6
South	-0.078	-1.0
West	-0.138	-1.4
High school measures		
Ability	-0.0005	-0.4
Percentile rank in class	0.0067	4.8
Academic program	0.250	3.0
Vocational-technical program	-0.084	-1.2
Family background		
Father's education	0.0245	1.5
Mother's education	0.0183	0.9
Father's occupation (SEI)	-0.0010	-0.6
Mother's professional status	0.315	2.5
Mother's homemaker status	-0.100	-1.5
Number of siblings	-0.034	-1.6
Number of siblings in college	0.055	0.9
Friends plan college	0.221	3.4
R^2	0.177	
S	0.817	
F	9.6	
N	776	
MALES		
Constant	10.7	17.5
Race/Ethnicity		
Black	0.085	0.3
Hispanic	0.390	1.5
Region		
Northeast	0.022	0.1
South	0.197	1.3
West	-0.040	-0.2
High school measures		
Ability	0.0033	1.5
Percentile rank in class	-0.0014	-0.5
Academic program	0.702	4.8
Vocational-technical program	0.066	0.5
Family background		
Father's education	-0.0150	-0.5
Mother's education	0.0786	2.2
Father's occupation (SEI)	0.0029	1.0
Mother's professional status	-0.306	-1.5
Mother's homemaker status	-0.114	-1.0
Number of siblings	0.103	2.4
Number of siblings in college	-0.044	-0.4
Friends plan college	0.348	2.8
R^2	0.192	
S	0.941	
F	3.9	
N	295	

Table D.3

Regression Results for Expected Years of Educational Attainment: Single Nonparents as of October 1976

Variable	1972 b	1972 t	1973 b	1973 t	1974 b	1974 t	1976 b	1976 t
FEMALES								
Constant	9.72	33.2	8.47	29.5	8.64	28.6	8.35	26.2
Race/Ethnicity								
Black	1.203	13.0	1.351	14.9	1.399	14.6	1.382	13.7
Hispanic	0.920	5.7	0.912	5.8	0.864	5.2	1.194	6.8
Indian	0.870	2.9	0.719	2.4	0.514	1.6	0.309	0.9
Oriental	0.611	2.9	0.672	3.3	0.471	2.2	0.051	0.2
Other minority	0.554	3.1	0.590	3.4	0.496	2.7	0.598	3.1
Region								
Northeast	-0.078	-1.0	0.098	1.3	0.068	0.8	-0.041	-0.5
South	0.124	1.6	0.352	4.8	0.385	4.9	0.273	3.3
West	0.085	1.0	0.184	2.1	0.138	1.5	0.089	0.9
High school measures								
Ability	0.0131	10.2	0.0160	12.6	0.0157	11.8	0.0200	14.2
Percentile rank in class	0.0076	5.6	0.0099	7.5	0.0101	7.3	0.0088	6.0
Academic program	0.646	8.9	0.804	11.4	0.787	10.5	0.788	10.0
Vocational-technical program	-0.797	-9.7	-0.670	-8.3	-0.768	-9.0	-0.604	-6.7
Family background								
Father's education	0.0567	4.1	0.0575	4.2	0.0438	3.1	0.0540	3.6
Mother's education	0.0400	2.3	0.0646	3.8	0.0962	5.3	0.0745	3.9
Father's occupation (SEI)	0.0027	1.8	0.0037	2.5	0.0026	1.7	0.0014	0.9
Mother's professional status	0.371	3.9	0.213	2.3	0.031	0.3	0.175	1.7
Mother's homemaker status	0.123	2.0	-0.025	-0.4	-0.069	-1.1	-0.027	-0.4
Number of siblings	-0.105	-5.3	-0.083	-4.3	-0.082	-4.0	-0.065	-3.0
Number of siblings in college	0.124	3.0	0.140	3.4	0.138	3.2	0.191	4.2
Friends plan college	0.679	10.4	0.544	8.5	0.552	8.2	0.585	8.2
Catholic	-0.033	-0.5	0.091	1.4	0.056	0.8	0.030	0.4
Jewish	0.271	1.9	0.665	4.7	0.641	4.3	0.472	3.0
R^2	0.472		0.425		0.406		0.380	
S	1.387		1.683		1.766		1.898	
F	105.5		134.4		122.9		114.2	
N	2624		4021		3982		4128	
MALES								
Constant	9.78	36.3	9.38	34.5	8.83	32.3	9.24	33.1
Race/Ethnicity								
Black	0.958	9.9	1.094	11.2	1.345	13.7	1.363	13.7
Hispanic	0.709	4.9	0.560	3.8	0.824	5.6	0.847	5.7
Indian	0.113	0.4	0.437	1.6	0.451	1.7	0.691	2.5
Oriental	0.079	0.4	0.529	2.8	0.599	3.2	0.181	0.9
Other minority	0.377	2.2	0.247	1.4	0.232	1.3	0.324	1.8
Region								
Northeast	-0.099	-1.3	-0.120	-1.6	-0.105	-1.4	-0.044	-0.6
South	0.154	2.2	0.208	3.0	0.150	2.1	0.037	0.5
West	0.056	0.7	-0.069	-0.9	-0.106	-1.3	-0.276	-3.4
High school measures								
Ability	0.0135	11.9	0.0131	11.5	0.0155	13.5	0.0156	13.3
Percentile rank in class	0.0116	10.1	0.0156	13.4	0.0136	11.6	0.0174	14.5
Academic program	0.722	11.0	0.793	12.0	0.723	10.9	0.579	8.5
Vocational-technical program	-0.373	-4.7	-0.225	-2.8	-0.266	-3.3	-0.289	-3.5
Family background								
Father's education	0.0721	5.5	0.0743	5.6	0.0837	6.3	0.0755	5.6
Mother's education	0.0096	0.6	0.0335	2.0	0.0439	2.6	0.0407	2.4
Father's occupation (SEI)	0.0042	3.1	0.0065	4.6	0.0071	5.1	0.0066	4.6
Mother's professional status	0.132	1.4	0.146	1.6	0.001	0.0	0.006	0.1
Mother's homemaker status	0.053	0.9	0.090	1.6	0.040	0.7	0.072	1.2
Number of siblings	-0.084	-4.7	-0.144	-7.9	-0.116	-6.3	-0.154	-8.2
Number of siblings in college	0.174	4.5	0.235	6.0	0.196	5.0	0.254	6.3
Friends plan college	0.755	12.4	0.670	10.9	0.674	10.9	0.644	10.2
Catholic	0.074	1.2	0.093	1.5	0.012	0.2	-0.002	-0.0
Jewish	0.697	4.8	0.916	6.2	0.617	4.2	0.471	3.1
R^2	0.464		0.393		0.394		0.374	
S	1.458		1.845		1.841		1.938	
F	130.4		154.0		151.7		148.7	
N	3339		5244		5168		5495	

Table D.4

Regression Results for Expected Years of Educational Attainment: Nonparents Married as of October 1973

Variable	1972 b	1972 t	1973 b	1973 t	1974 b	1974 t	1976 b	1976 t
FEMALES								
Constant	9.7	12.5	10.1	16.7	9.9	15.0	9.3	12.8
Race/Ethnicity								
Black	1.467	4.7	1.544	6.4	1.812	6.8	1.982	6.8
Hispanic	0.762	2.0	0.341	1.2	0.491	1.5	0.602	1.7
Region								
Northeast	-0.275	-1.0	-0.450	-2.2	-0.171	-0.7	-0.476	-1.9
South	0.264	1.4	-0.262	-1.3	-0.178	-1.1	-0.180	-1.0
West	0.352	1.5	-0.098	-0.5	0.224	1.1	-0.002	-0.0
High school measures								
Ability	0.0110	3.3	0.0107	4.2	0.0068	2.4	0.0101	3.3
Percentile rank in class	0.0030	0.9	0.0027	1.1	0.0087	3.1	0.0095	3.1
Academic program	0.845	4.2	0.644	4.1	0.464	2.7	0.641	3.4
Vocational-technical program	-0.390	-2.3	0.028	0.2	-0.038	-0.4	-0.065	-0.4
Family background								
Father's education	0.073	1.8	0.038	1.2	0.047	1.4	0.046	1.2
Mother's education	-0.004	-0.1	0.009	0.2	0.066	1.5	0.113	2.4
Father's occupation (SEI)	0.0022	0.6	0.0033	1.1	0.0029	0.9	-0.0015	-0.4
Mother's professional status	0.385	1.3	0.747	3.2	0.582	2.3	-0.125	-0.4
Mother's homemaker status	0.083	0.5	-0.006	-0.0	0.002	0.0	-0.133	-0.9
Number of siblings	-0.026	-0.5	-0.029	-0.7	-0.038	-0.9	-0.044	-0.9
Number of siblings in college	-0.153	-1.1	0.068	0.6	0.152	1.2	0.188	1.4
Friends plan college	0.626	4.0	0.563	4.7	0.414	3.1	0.407	2.8
R^2	0.335		0.269		0.241		0.250	
S	1.478		1.435		1.581		1.748	
F	12.6		14.7		12.6		13.5	
N	443		696		693		708	
MALES								
Constant	8.0	6.0	7.8	5.9	9.0	6.9	8.3	6.3
Race/Ethnicity								
Black	0.749	1.2	0.967	1.6	0.723	1.2	2.234	3.7
Hispanic	1.131	2.0	0.825	1.5	0.584	1.1	0.747	1.3
Region								
Northeast	-0.124	-0.2	-0.219	-0.4	-0.157	-0.3	0.350	0.7
South	0.405	1.3	0.028	0.1	0.347	1.1	0.436	1.4
West	0.215	0.5	0.338	0.8	0.190	0.5	0.334	0.8
High school measures								
Ability	0.0124	2.5	0.0071	1.4	0.0115	2.4	0.0141	2.9
Percentile rank in class	0.0053	0.9	0.0037	0.7	0.0070	1.3	-0.0104	-1.9
Academic program	1.080	3.4	1.513	4.8	1.594	5.1	1.452	4.6
Vocational-technical program	-0.278	-0.9	-0.021	-0.1	-0.339	-1.1	-0.267	-0.9
Family background								
Father's education	-0.038	-0.6	0.071	1.2	-0.059	-1.0	0.053	0.9
Mother's education	0.200	2.6	0.341	4.5	0.185	2.5	0.113	1.5
Father's occupation (SEI)	0.0061	0.9	-0.0022	-0.3	0.0044	0.7	0.0040	0.6
Mother's professional status	0.412	0.9	-1.010	-2.2	-0.899	-2.0	-0.648	-1.4
Mother's homemaker status	0.242	0.9	-0.260	-1.0	-0.042	-0.2	-0.001	-0.0
Number of siblings	0.071	0.8	-0.166	-1.8	0.042	0.5	0.138	1.5
Number of siblings in college	-0.278	-1.1	0.183	0.8	0.232	1.0	0.209	0.9
Friends plan college	1.184	4.3	0.109	0.4	0.698	2.6	0.951	3.5
R^2	0.479		0.350		0.345		0.279	
S	1.433		1.858		1.848		1.957	
F	6.7		7.2		7.2		5.8	
N	142		247		251		275	

Table D.5

Regression Results for the Career Aspiration Measures: Single Nonparents as of October 1976

Variable	1972 b	1972 t	1973 b	1973 t	1974 b	1974 t	1976 b	1976 t
FEMALES								
Constant	18.3	6.2	10.9	4.5	9.6	4.0	9.4	4.0
Race/Ethnicity								
Black	3.609	3.8	7.066	9.3	6.574	8.6	6.473	8.7
Hispanic	2.287	1.4	7.291	5.4	5.025	3.7	4.208	3.2
Indian	-2.883	-0.9	1.031	0.4	3.291	1.3	2.364	0.9
Oriental	1.066	0.5	1.951	1.1	2.061	1.2	0.978	0.6
Other minority	4.416	2.4	5.305	3.5	3.501	2.3	5.198	3.5
Region								
Northeast	1.359	1.7	0.087	0.1	-0.186	-0.3	-0.174	-0.3
South	1.888	2.4	1.003	1.6	0.783	1.2	0.527	0.8
West	3.243	3.5	0.258	0.3	0.421	0.6	0.490	0.7
High school measures								
Ability	0.109	8.1	0.124	11.4	0.118	10.7	0.120	11.3
Percentile rank in class	0.043	3.0	0.041	3.6	0.046	4.0	0.039	3.6
Academic program	6.271	8.4	4.992	8.2	4.933	8.1	5.080	8.6
Vocational-technical program	-10.161	-11.9	-5.540	-8.0	-5.079	-7.3	-3.827	-5.6
Family background								
Father's education	0.142	1.0	0.403	3.4	0.148	1.2	0.375	3.3
Mother's education	0.494	2.7	0.388	2.6	0.786	5.3	0.523	3.6
Father's occupation (SEI)	0.006	0.4	0.018	1.4	0.031	2.5	0.014	1.2
Mother's professional status	1.603	1.6	1.377	1.7	-0.113	-0.1	0.996	1.3
Mother's homemaker status	0.032	0.0	-1.008	-1.9	-0.544	-1.0	-0.464	-0.9
R^2	0.300		0.256		0.243		0.232	
S	14.831		14.424		14.590		14.477	
F	67.9		78.7		74.5		73.0	
N	2714		3901		3966		4136	
MALES								
Constant	5.2	1.6	-5.8	-2.3	-5.4	-2.1	-4.1	-1.7
Race/Ethnicity								
Black	8.057	6.9	8.415	9.1	8.145	8.8	8.962	10.1
Hispanic	4.269	2.4	5.012	3.6	6.717	4.8	4.299	3.2
Indian	2.047	0.6	0.781	0.3	1.660	0.6	1.197	0.5
Oriental	2.553	1.1	5.591	3.1	5.500	3.0	3.025	1.7
Other minority	0.487	0.2	2.320	1.4	-0.735	-0.4	1.845	1.2
Region								
Northeast	-0.079	-0.1	0.089	0.1	-0.092	-0.1	1.075	1.6
South	2.042	2.4	1.653	2.5	1.700	2.5	1.225	1.9
West	1.119	1.1	0.544	0.7	0.204	0.3	-0.666	-0.9
High school measures								
Ability	0.143	10.3	0.132	12.1	0.135	12.4	0.140	13.4
Percentile rank in class	0.091	6.4	0.101	8.9	0.110	9.7	0.122	11.3
Academic program	5.436	6.8	7.962	12.5	6.462	10.1	4.165	6.8
Vocational-technical program	-6.930	-7.1	-3.878	-5.0	-3.654	-4.7	-3.814	-5.2
Family background								
Father's education	0.191	1.2	0.450	3.5	0.642	5.0	0.438	3.6
Mother's education	0.210	1.0	0.696	4.3	0.430	2.7	0.382	2.5
Father's occupation (SEI)	0.056	3.2	0.101	7.5	0.088	6.5	0.078	6.0
Mother's professional status	-0.003	-0.0	-1.920	-2.1	-0.424	-0.5	0.818	0.9
Mother's homemaker status	0.772	1.1	-0.437	-0.8	0.436	0.8	0.052	0.1
R^2	0.236		0.295		0.278		0.254	
S	18.019		17.726		17.827		17.623	
F	59.8		124.8		115.8		109.7	
N	3308		5086		5139		5507	

Table D.6

Regression Results for the Career Aspiration Measures: Nonparents Married as of October 1973

Variable	1972 b	1972 t	1973 b	1973 t	1974 b	1974 t	1976 b	1976 t
FEMALES								
Constant	30.1	4.1	22.9	4.6	18.2	3.5	25.3	4.9
Race/Ethnicity								
Black	10.473	3.4	6.672	3.3	10.063	4.7	6.614	3.1
Hispanic	5.807	1.5	4.622	1.8	3.996	1.5	4.941	1.9
Region								
Northeast	2.054	0.8	-1.674	-0.9	-0.950	-0.5	0.218	0.1
South	1.229	0.7	-2.422	-2.0	-2.252	-1.8	-1.145	-0.9
West	3.179	1.4	-1.330	-0.9	-0.166	-0.1	0.495	0.3
High school measures								
Ability	0.032	1.0	0.046	2.1	0.091	4.0	0.060	2.6
Percentile rank in class	0.008	0.2	0.021	0.9	0.041	1.8	0.044	1.9
Academic program	8.772	4.4	7.317	5.5	5.577	4.0	5.864	4.2
Vocational-technical program	-5.865	-3.5	0.076	0.1	-0.148	-0.1	0.297	0.3
Family background								
Father's education	1.44	3.7	0.44	1.7	0.40	1.5	0.20	0.7
Mother's education	-0.64	-1.3	0.31	0.9	-0.02	-0.0	0.08	0.2
Father's occupation (SEI)	-0.072	-1.8	-0.022	-0.8	-0.044	-1.6	-0.021	-0.8
Mother's professional status	5.650	1.9	3.805	1.9	2.358	1.1	-0.497	-0.2
Mother's homemaker status	-1.169	-0.8	-0.860	-0.8	-0.060	-0.1	-1.743	-1.6
R^2	0.218		0.159		0.159		0.111	
S	15.183		12.139		12.661		13.191	
F	9.0		8.9		9.0		6.4	
N	466		674		681		736	
MALES								
Constant	-27.5	-2.1	-9.2	-0.8	-5.4	-0.5	-6.3	-0.7
Race/Ethnicity								
Black	7.640	1.1	4.896	0.8	7.411	1.4	6.195	1.2
Hispanic	4.794	0.7	-0.609	-0.1	7.811	1.6	4.537	1.0
Region								
Northeast	-2.680	-0.5	2.559	0.5	-2.150	-0.5	-5.202	-1.3
South	0.147	0.0	3.539	1.1	2.590	0.9	1.231	0.5
West	1.421	0.3	5.097	1.3	1.249	0.3	-2.201	-0.6
High school measures								
Ability	0.189	3.3	0.066	1.4	0.099	2.2	0.112	2.7
Percentile rank in class	0.016	0.2	0.118	2.2	0.086	1.7	0.068	1.4
Academic program	6.898	1.9	9.209	3.0	9.334	3.3	8.749	3.3
Vocational-technical program	-1.303	-0.4	-3.191	-1.1	-3.183	-1.2	-1.993	-0.8
Family background								
Father's education	0.71	1.0	-0.11	-0.2	-0.45	-0.8	-0.42	-0.8
Mother's education	1.09	1.3	2.21	3.0	1.41	2.1	1.65	2.6
Father's occupation (SEI)	0.138	1.8	-0.014	-0.2	0.129	2.2	0.118	2.1
Mother's professional status	3.820	0.7	1.791	0.4	-5.901	-1.4	-1.666	-0.4
Mother's homemaker status	3.142	1.0	1.871	0.7	1.465	0.6	-1.534	-0.7
R^2	0.292		0.210		0.244		0.232	
S	17.395		18.315		17.120		17.048	
F	4.2		4.4		5.6		5.8	
N	156		246		257		282	

Table D.7

Regression Results for the Professional Aspiration Measures: Single Nonparents as of October 1976

Variable	1972 b	1972 t	1973 b	1973 t	1974 b	1974 t	1976 b	1976 t
FEMALES								
Constant	-5.67		-5.37		-5.12		-4.78	
Race/Ethnicity								
Black	0.552	3.5	0.910	7.5	0.767	6.4	0.644	5.7
Hispanic	0.421	1.5	0.792	3.7	0.494	2.4	0.405	2.0
Indian	-0.266	-0.5	0.451	1.1	0.334	0.8	0.244	0.6
Oriental	0.221	0.6	0.141	0.5	0.313	1.1	-0.044	-0.2
Other minority	0.804	2.6	0.556	2.3	0.366	1.6	0.551	2.5
Region								
Northeast	0.241	1.8	-0.025	-0.2	-0.006	-0.1	-0.054	-0.6
South	0.263	2.0	0.109	1.1	0.115	1.2	0.112	1.2
West	0.524	3.4	0.123	1.0	0.039	0.3	0.116	1.0
High school measures								
Ability	0.0183	8.2	0.0181	10.4	0.0145	8.5	0.0144	8.8
Percentile rank in class	0.0061	2.6	0.0039	2.2	0.0051	2.9	0.0028	1.7
Academic program	1.042	8.4	0.802	8.3	0.765	8.0	0.731	8.1
Vocational-technical program	-1.718	-12.1	-0.946	-8.5	-0.936	-8.6	-0.572	-5.5
Family background								
Father's education	0.020	0.8	0.037	2.0	0.009	0.5	0.034	2.0
Mother's education	0.092	3.0	0.051	2.1	0.102	4.4	0.056	2.6
Father's occupation (SEI)	0.0006	0.3	0.0029	1.5	0.0051	2.6	0.0024	1.3
Mother's professional status	0.262	1.6	0.262	2.0	0.179	1.4	0.259	2.1
Mother's homemaker status	0.009	0.1	-0.138	-1.7	-0.053	-0.6	-0.090	-1.2
R^2	0.302		0.224		0.212		0.171	
S	0.410		0.437		0.442		0.456	
F	68.5		66.0		62.4		49.8	
N	2714		3901		3966		4136	
MALES								
Constant	-5.07		-5.63		-5.60		-5.25	
Race/Ethnicity								
Black	0.770	5.3	0.843	7.2	0.840	7.2	0.843	7.5
Hispanic	0.400	1.8	0.423	2.4	0.630	3.6	0.335	2.0
Indian	0.089	0.2	0.151	0.5	0.252	0.8	0.397	1.2
Oriental	0.073	0.3	0.656	2.8	0.632	2.8	0.431	2.0
Other minority	0.199	0.8	0.247	1.2	0.169	0.8	0.235	1.2
Region								
Northeast	-0.029	-0.3	-0.041	-0.4	-0.050	-0.6	0.033	0.4
South	0.112	1.1	-0.006	-0.1	0.081	1.0	-0.008	-0.1
West	0.093	0.8	-0.037	-0.4	0.002	0.0	-0.069	-0.7
High school measures								
Ability	0.0148	8.6	0.0129	9.3	0.0138	10.0	0.0125	9.4
Percentile rank in class	0.0119	6.7	0.0120	8.4	0.0117	8.2	0.0142	10.3
Academic program	0.640	6.4	0.760	9.4	0.577	7.2	0.308	4.0
Vocational-technical program	-0.765	-6.3	-0.444	-4.5	-0.511	-5.3	-0.410	-4.4
Family background								
Father's education	0.042	2.1	0.047	2.8	0.076	4.7	0.044	2.9
Mother's education	0.021	0.8	0.064	3.1	0.026	1.3	0.026	1.3
Father's occupation (SEI)	0.0040	1.9	0.0087	5.1	0.0065	3.8	0.0068	4.1
Mother's professional status	0.063	0.4	-0.066	-0.6	0.104	0.9	0.244	2.2
Mother's homemaker status	0.076	0.9	-0.041	-0.6	-0.012	-0.2	0.016	0.2
R^2	0.204		0.210		0.197		0.163	
S	0.447		0.445		0.448		0.449	
F	49.5		79.1		74.0		62.8	
N	3308		5086		5139		5507	

Table D.8

Regression Results for the Professional Aspiration Measures: Nonparents Married as of October 1973

Variable	1972 b	1972 t	1973 b	1973 t	1974 b	1974 t	1976 b	1976 t
FEMALES								
Constant	-2.8		-5.4		-5.4		-3.2	
Race/Ethnicity								
Black	1.730	3.4	1.349	3.0	1.875	4.3	0.904	2.2
Hispanic	0.835	1.3	1.091	2.0	0.383	0.7	0.850	1.7
Region								
Northeast	0.341	0.8	-0.243	-0.6	-0.243	-0.6	0.100	0.3
South	0.043	0.1	-0.527	-1.9	-0.480	-1.8	-0.282	-1.2
West	0.564	1.5	-0.262	-0.8	0.120	0.4	-0.210	-0.7
High school measures								
Ability	0.0041	0.8	0.0069	1.4	0.0160	3.4	0.0047	1.1
Percentile rank in class	-0.0015	-0.3	0.0070	1.4	0.0059	1.3	0.0076	1.8
Academic program	1.509	4.6	1.542	5.2	0.865	3.0	0.892	3.4
Vocational-technical program	-1.016	-3.7	-0.067	-0.3	-0.207	-0.9	-0.201	-0.9
Family background								
Father's education	0.240	3.7	0.088	1.5	0.070	1.2	0.052	1.0
Mother's education	-0.140	-1.7	0.096	1.3	-0.014	-0.2	0.013	0.2
Father's occupation (SEI)	-0.0104	-1.6	-0.0061	-1.1	-0.0088	-1.6	-0.0056	-1.1
Mother's professional status	0.830	1.7	0.809	1.8	0.545	1.3	0.252	0.6
Mother's homemaker status	-0.205	-0.8	-0.278	-1.2	-0.018	-0.1	-0.270	-1.3
R^2	0.218		0.154		0.123		0.077	
S	0.415		0.381		0.391		0.408	
F	9.0		8.5		6.7		4.3	
N	466		674		681		736	
MALES								
Constant	-12.5		-7.2		-7.4		-8.2	
Race/Ethnicity								
Black	0.502	0.4	0.685	0.8	1.259	1.4	0.946	1.1
Hispanic	-1.292	-1.1	-0.787	-0.9	1.239	1.5	0.588	0.7
Region								
Northeast	-0.402	-0.4	-0.232	-0.3	-0.492	-0.7	-0.707	-1.0
South	0.080	0.1	0.060	0.1	-0.405	-0.8	0.016	0.0
West	0.863	1.0	0.791	1.3	-0.140	-0.2	-0.127	-0.2
High school measures								
Ability	0.0269	2.7	0.0032	0.4	0.0191	2.6	0.0224	3.2
Percentile rank in class	0.0081	0.7	0.0217	2.6	0.0058	0.7	0.0089	1.1
Academic program	1.401	2.2	1.657	3.5	1.254	2.6	0.851	1.9
Vocational-technical program	-0.558	-0.9	-0.227	-0.5	-0.488	-1.1	-0.054	-0.1
Family background								
Father's education	0.211	1.7	-0.088	-1.0	-0.086	-1.0	-0.163	-1.9
Mother's education	0.116	0.8	0.376	3.3	0.228	2.0	0.250	2.4
Father's occupation (SEI)	0.0202	1.5	-0.0040	-0.4	-0.0008	-0.1	0.0159	1.7
Mother's professional status	0.618	0.7	0.649	0.9	-0.513	-0.7	-0.414	-0.6
Mother's homemaker status	0.369	0.7	0.454	1.2	0.158	0.4	-0.097	-0.3
R^2	0.320		0.200		0.158		0.160	
S	0.363		0.378		0.369		0.371	
F	4.7		4.1		3.3		3.6	
N	156		246		257		282	

Table D.9

Regression Results for the Homemaker Aspiration Measures: Single Nonparents as of October 1976

Variable	1972 b	1972 t	1973 b	1973 t	1974 b	1974 t	1976 b	1976 t
			FEMALES					
Constant	-3.80		1.96		1.66		2.65	
Race/Ethnicity								
Black	-0.520	-1.2	-1.304	-8.1	-1.257	-7.8	-1.408	-8.4
Hispanic	-0.851	-1.1	-1.323	-4.7	-0.845	-3.0	-1.019	-3.4
Indian	0.521	0.4	-1.016	-1.9	0.361	0.7	-0.814	-1.4
Oriental	-1.340	-1.3	-0.650	-1.7	-0.592	-1.6	-0.064	-0.2
Other minority	-0.032	-0.0	-0.197	-0.6	-0.238	-0.7	-0.311	-0.9
Region								
Northeast	-0.117	-0.3	0.099	0.7	0.028	0.2	-0.093	-0.7
South	-0.030	-0.1	-0.363	-2.7	-0.262	-1.9	-0.357	-2.5
West	0.785	1.9	-0.281	-1.8	-0.285	-1.8	-0.456	-2.7
High school measures								
Ability	-0.0002	-0.0	-0.0162	-7.0	-0.0138	-5.9	-0.0172	-7.1
Percentile rank in class	-0.0199	-3.1	-0.0006	-0.3	-0.0029	-1.2	0.0030	1.2
Academic program	-0.496	-1.5	-0.600	-4.7	-0.512	-4.0	-0.369	-2.7
Vocational-technical program	-0.334	-0.9	0.212	1.4	0.252	1.7	0.278	1.8
Family background								
Father's education	-0.034	-0.5	-0.004	-0.1	-0.022	-0.9	-0.026	-1.0
Mother's education	0.139	1.7	-0.019	-0.6	-0.026	-0.8	-0.042	-1.3
Father's occupation (SEI)	0.0081	1.2	0.0027	1.0	0.0057	2.1	-0.0009	-0.3
Mother's professional status	-0.976	-2.2	-0.193	-1.1	-0.306	-1.8	-0.188	-1.0
Mother's homemaker status	-0.205	-0.7	0.416	3.8	0.389	3.5	-0.020	-0.2
R^2	0.015		0.074		0.067		0.052	
S	0.150		0.329		0.322		0.304	
F	2.3		18.6		17.0		13.4	
N	2714		3959		4032		4195	

Table D.10

Regression Results for the Homemaker Aspiration Measures: Nonparents Married as of October 1973

Variable	1972 b	1972 t	1973 b	1973 t	1974 b	1974 t	1976 b	1976 t
			FEMALES					
Constant	-0.83		1.83		1.83		3.08	
Race/Ethnicity								
Black	-0.878	-1.2	-0.807	-2.2	-1.350	-3.8	-1.120	-3.1
Hispanic	-0.691	-0.8	-0.493	-1.1	-0.301	-0.7	-1.178	-2.6
Region								
Northeast	0.878	1.4	-0.071	-0.2	0.063	0.2	-0.339	-1.1
South	0.040	0.1	-0.358	-1.6	-0.137	-0.6	-0.766	-3.5
West	-0.100	-0.2	0.049	0.2	-0.303	-1.1	-0.730	-2.6
High school measures								
Ability	-0.0150	-2.0	-0.0085	-2.2	-0.0117	-3.1	-0.0107	-2.7
Percentile rank in class	-0.0002	-0.0	-0.0050	-1.3	0.0010	0.3	-0.0036	-0.9
Academic program	-0.806	-1.7	-0.520	-2.2	-0.299	-1.3	-0.240	-1.0
Vocational-technical program	-1.419	-3.7	-0.234	-1.2	-0.110	-0.6	-0.338	-1.7
Family background								
Father's education	-0.220	-2.4	0.031	0.7	-0.024	-0.5	0.060	1.3
Mother's education	0.369	3.2	-0.051	-0.9	-0.005	-0.1	-0.158	-2.7
Father's occupation (SEI)	0.0078	0.9	-0.0023	-0.5	0.0080	1.8	-0.0023	-0.5
Mother's professional status	-0.665	-1.0	0.125	0.4	0.379	1.1	0.623	1.7
Mother's homemaker status	0.091	0.3	0.556	3.1	0.380	2.1	0.696	3.8
R^2	0.067		0.071		0.055		0.095	
S	0.296		0.470		0.476		0.445	
F	2.3		3.7		2.9		5.6	
N	466		694		701		756	

Table D.11

Regression Results for Satisfaction With Career Progress: Single Nonparents as of October 1976

Variable	1976 b	1976 t
FEMALES		
Constant	2.97	23.0
Race/Ethnicity		
Black	-0.256	-6.3
Hispanic	-0.110	-1.5
Indian	0.176	1.3
Oriental	-0.148	-1.5
Other minority	0.070	0.9
Region		
Northeast	-0.026	-0.7
South	0.006	0.2
West	0.018	0.5
High school measures		
Ability	-0.0015	-2.6
Percentile rank in class	0.0037	6.0
Academic program	0.112	3.4
Vocational-technical program	0.040	1.1
Family background		
Father's education	0.0067	1.1
Mother's education	0.0052	0.6
Father's occupation (SEI)	-0.0007	-1.0
Mother's professional status	-0.038	-0.9
Mother's homemaker status	0.018	0.6
R^2	0.028	
S	0.804	
F	7.2	
N	4212	
MALES		
Constant	3.05	27.9
Race/Ethnicity		
Black	-0.231	-5.8
Hispanic	-0.057	-1.0
Indian	-0.177	-1.6
Oriental	-0.132	-1.7
Other minority	-0.057	-0.8
Region		
Northeast	-0.024	-0.8
South	0.043	1.5
West	0.022	0.7
High school measures		
Ability	-0.0016	-3.4
Percentile rank in class	0.0036	7.3
Academic program	0.079	2.9
Vocational-technical program	0.069	2.1
Family background		
Father's education	0.0112	2.0
Mother's education	-0.0073	-1.0
Father's occupation (SEI)	-0.0003	-0.6
Mother's professional status	0.018	0.5
Mother's homemaker status	0.019	0.8
R^2	0.023	
S	0.794	
F	7.5	
N	5563	

Table D.12

Regression Results for Satisfaction With Career Progress: Nonparents Married as of October 1973

Variable	1976 b	1976 t
FEMALES		
Constant	3.49	11.9
Race/Ethnicity		
Black	-0.278	-2.3
Hispanic	-0.298	-2.0
Region		
Northeast	-0.135	-1.3
South	0.028	0.4
West	-0.108	-1.2
High school measures		
Ability	-0.0042	-3.2
Percentile rank in class	0.0028	2.1
Academic program	0.024	0.3
Vocational-technical program	-0.007	-0.1
Family background		
Father's education	-0.0016	-0.1
Mother's education	0.0208	1.1
Father's occupation (SEI)	0.0017	1.1
Mother's professional status	0.045	0.4
Mother's homemaker status	0.061	1.0
R^2	0.033	
S	0.765	
F	1.8	
N	754	
MALES		
Constant	3.74	8.7
Race/Ethnicity		
Black	-0.160	-0.7
Hispanic	-0.247	-1.2
Region		
Northeast	0.152	0.8
South	0.252	2.1
West	0.003	0.0
High school measures		
Ability	-0.0021	-1.1
Percentile rank in class	0.0031	1.5
Academic program	-0.125	-1.1
Vocational-technical program	-0.038	-0.3
Family background		
Father's education	0.0054	0.2
Mother's education	-0.0457	-1.6
Father's occupation (SEI)	0.0019	0.8
Mother's professional status	-0.182	-1.1
Mother's homemaker status	0.059	0.6
R^2	0.064	
S	0.760	
F	1.3	
N	287	

Table D.13

Regression Results for Hourly Pay Rates: Single Nonparents as of October 1976

Variable	1974 b	1974 t	1976 b	1976 t
FEMALES				
Constant	3.13	7.3	3.10	7.3
Race/Ethnicity				
Black	0.036	0.3	0.173	1.3
Hispanic	-0.204	-0.8	0.344	1.5
Indian	-0.288	-0.6	-0.665	-1.5
Oriental	-0.098	-0.3	0.171	0.5
Other minority	0.129	0.5	0.074	0.3
Region				
Northeast	0.182	1.6	0.179	1.6
South	-0.240	-2.1	-0.095	-0.8
West	0.084	0.6	0.063	0.5
High school measures				
Ability	-0.0023	-1.2	-0.0003	-0.1
Percentile rank in class	-0.0005	-0.3	0.0097	4.9
Academic program	0.050	0.5	0.158	1.5
Vocational-technical program	0.280	2.3	0.248	2.0
Family background				
Father's education	0.0063	0.3	-0.0071	-0.3
Mother's education	-0.0042	-0.2	-0.0082	-0.3
Father's occupation (SEI)	-0.0008	-0.4	0.0021	1.0
Mother's professional status	-0.081	-0.6	-0.172	-1.2
Mother's homemaker status	0.135	1.4	0.096	1.0
R^2	0.015		0.024	
S	1.939		2.032	
F	2.0		3.6	
N	2194		2495	
MALES				
Constant	4.14	11.6	4.35	10.2
Race/Ethnicity				
Black	0.037	0.3	-0.516	-3.3
Hispanic	0.085	0.4	-0.154	-0.7
Indian	0.089	0.2	-0.328	-0.7
Oriental	0.200	0.8	-0.240	-0.8
Other minority	0.157	0.7	-0.200	-0.7
Region				
Northeast	-0.265	-2.7	-0.107	-0.9
South	-0.415	-4.4	-0.196	-1.7
West	-0.074	-0.7	0.159	1.2
High school measures				
Ability	-0.0013	-0.9	-0.0008	-0.4
Percentile rank in class	-0.0058	-3.6	-0.0025	-1.3
Academic program	-0.066	-0.7	0.085	0.8
Vocational-technical program	0.077	0.7	0.167	1.3
Family background				
Father's education	0.0068	0.4	0.0027	0.1
Mother's education	-0.0088	-0.4	0.0421	1.6
Father's occupation (SEI)	-0.0008	-0.4	-0.0058	-2.5
Mother's professional status	-0.078	-0.6	-0.289	-1.9
Mother's homemaker status	0.082	1.1	0.063	0.7
R^2	0.024		0.012	
S	1.875		2.449	
F	4.2		2.4	
N	3222		3477	

Table D.14

Regression Results for Hourly Pay Rates: Nonparents Married as of October 1973

Variable	1974 b	1974 t	1976 b	1976 t
FEMALES				
Constant	2.41	4.8	2.38	2.4
Race/Ethnicity				
Black	0.340	1.6	-0.130	-0.3
Hispanic	-0.260	-1.0	-0.330	-0.6
Region				
Northeast	0.174	1.0	0.105	0.3
South	0.065	0.5	0.129	0.5
West	0.213	1.3	0.326	1.0
High school measures				
Ability	-0.0042	-1.9	0.0034	0.8
Percentile rank in class	0.0065	2.9	-0.0011	-0.2
Academic program	0.310	2.3	0.193	0.7
Vocational-technical program	0.034	0.3	-0.253	-1.1
Family background				
Father's education	0.101	3.7	0.047	0.9
Mother's education	-0.046	-1.3	0.005	0.1
Father's occupation (SEI)	-0.0009	-0.3	-0.0020	-0.4
Mother's professional status	-0.080	-0.4	-0.182	-0.4
Mother's homemaker status	-0.042	-0.4	-0.169	-0.8
R^2	0.083		0.025	
S	1.023		2.026	
F	2.8		0.8	
N	452		459	
MALES				
Constant	3.70	3.8	6.09	4.9
Race/Ethnicity				
Black	0.114	0.2	-0.651	-1.0
Hispanic	-0.778	-1.6	-0.818	-1.3
Region				
Northeast	-0.335	-0.8	-0.322	-0.6
South	-0.323	-1.2	0.003	0.0
West	0.238	0.7	0.564	1.2
High school measures				
Ability	-0.0014	-0.3	-0.0117	-2.2
Percentile rank in class	-0.0035	-0.7	0.0172	2.8
Academic program	0.114	0.4	0.168	0.5
Vocational-technical program	0.364	1.4	0.024	0.1
Family background				
Father's education	0.017	0.3	0.103	1.6
Mother's education	0.041	0.6	-0.083	-1.0
Father's occupation (SEI)	-0.0043	-0.8	0.0003	0.0
Mother's professional status	0.647	1.7	0.913	1.8
Mother's homemaker status	-0.012	-0.1	-0.049	-0.2
R^2	0.072		0.079	
S	1.474		1.907	
F	1.1		1.2	
N	210		213	

Table D.15

Regression Results for Numbers of Children Expected: Single Nonparents as of October 1976

Variable	1973 b	1973 t	1976 b	1976 t
FEMALES				
Constant	2.18	11.3	2.07	9.4
Race/Ethnicity				
Black	0.007	0.1	0.070	1.0
Hispanic	-0.109	-1.0	0.016	0.1
Indian	0.085	0.4	0.019	0.1
Oriental	-0.223	-1.6	-0.016	-0.1
Other minority	-0.163	-1.4	0.073	0.5
Region				
Northeast	0.050	1.0	0.106	1.8
South	-0.123	-2.5	-0.088	-1.6
West	-0.110	-1.9	-0.020	-0.3
High school measures				
Ability	-0.0006	-0.7	-0.0026	-2.7
Percentile rank in class	-0.0008	-0.9	0.0004	0.4
Academic program	0.067	1.4	0.051	0.9
Vocational-technical program	-0.018	-0.3	-0.055	-0.9
Family background				
Father's education	-0.0023	-0.3	0.0135	1.3
Mother's education	0.0020	0.2	0.0085	0.6
Father's occupation (SEI)	0.0010	1.1	0.0006	0.5
Mother's professional status	0.021	0.3	0.130	1.8
Mother's homemaker status	-0.012	-0.3	0.062	1.3
Number of siblings	0.0428	3.4	0.0815	5.7
Catholic	0.236	5.6	0.175	3.6
R^2	0.024		0.024	
S	1.120		1.316	
F	5.1		5.3	
N	3914		4165	
MALES				
Constant	1.25	7.4	1.81	9.5
Race/Ethnicity				
Black	0.169	2.7	0.426	6.2
Hispanic	-0.155	-1.7	0.051	0.5
Indian	-0.036	-0.2	0.231	1.2
Oriental	-0.380	-3.2	-0.121	-0.9
Other minority	-0.324	-3.0	-0.113	-0.9
Region				
Northeast	0.204	4.4	0.085	1.6
South	0.068	1.5	-0.021	-0.4
West	0.002	0.0	-0.017	-0.3
High school measures				
Ability	0.0010	1.4	-0.0018	-2.2
Percentile rank in class	0.0015	2.0	0.0007	0.8
Academic program	0.057	1.4	0.085	1.8
Vocational-technical program	-0.064	-1.3	-0.116	-2.1
Family background				
Father's education	-0.0004	-0.0	0.0128	1.4
Mother's education	0.0066	0.6	0.0105	0.9
Father's occupation (SEI)	0.0018	2.1	-0.0001	-0.1
Mother's professional status	-0.026	-0.4	-0.001	-0.0
Mother's homemaker status	-0.086	-2.4	0.041	1.0
Number of siblings	0.0787	7.1	0.0962	7.8
Catholic	0.229	6.1	0.179	4.3
R^2	0.042		0.034	
S	1.118		1.335	
F	11.2		10.0	
N	4812		5456	

Table D.16

Regression Results for Numbers of Children Expected: Nonparents Married as of October 1973

Variable	1973 b	1973 t	1976 b	1976 t
FEMALES				
Constant	1.59	4.7	1.43	3.4
Race/Ethnicity				
Black	0.165	1.2	0.363	2.2
Hispanic	0.151	0.9	0.185	0.9
Region				
Northeast	0.079	0.7	-0.006	-0.0
South	-0.066	-0.8	-0.080	-0.8
West	0.006	0.1	0.094	0.7
High school measures				
Ability	0.0026	1.8	0.0046	2.6
Percentile rank in class	-0.0008	-0.6	-0.0031	-1.7
Academic program	-0.054	-0.6	-0.048	-0.4
Vocational-technical program	0.126	1.7	0.049	0.5
Family background				
Father's education	-0.0053	-0.3	0.0093	0.4
Mother's education	0.0029	0.1	-0.0223	-0.8
Father's occupation (SEI)	-0.0004	-0.2	-0.0033	-1.5
Mother's professional status	0.117	0.9	0.124	0.8
Mother's homemaker status	0.067	1.0	0.070	0.8
Number of siblings	0.0047	0.2	0.0058	0.2
Catholic	0.112	1.3	0.049	0.5
R^2	0.023		0.023	
S	0.825		1.051	
F	1.0		1.1	
N	706		766	
MALES				
Constant	1.39	2.3	1.23	1.7
Race/Ethnicity				
Black	0.008	0.0	-0.272	-0.8
Hispanic	-0.127	-0.5	0.825	2.4
Region				
Northeast	-0.032	-0.1	0.113	0.4
South	-0.026	-0.2	0.035	0.2
West	0.183	1.0	-0.148	-0.6
High school measures				
Ability	0.0021	1.0	0.0015	0.5
Percentile rank in class	0.0034	1.3	-0.0009	-0.3
Academic program	-0.216	-1.5	-0.002	-0.0
Vocational-technical program	-0.139	-1.0	-0.167	-1.0
Family background				
Father's education	-0.0163	-0.6	-0.0418	-1.3
Mother's education	0.0343	1.0	0.0731	1.7
Father's occupation (SEI)	-0.0017	-0.5	-0.0016	-0.4
Mother's professional status	-0.584	-2.8	-0.463	-1.8
Mother's homemaker status	0.092	0.8	0.172	1.2
Number of siblings	0.0302	0.7	0.0346	0.7
Catholic	0.131	0.8	-0.140	-0.7
R^2	0.101		0.065	
S	0.847		1.125	
F	1.6		1.2	
N	248		292	

Table D.17

Regression Results for the Self-Esteem Measures: Single Nonparents as of October 1976

Variable	1972 b	1972 t	1973 b	1973 t	1974 b	1974 t	1976 b	1976 t
FEMALES								
Constant	2.99	24.4	3.69	38.5	3.68	36.8	3.58	37.0
Race/Ethnicity								
Black	0.214	5.5	0.091	3.0	0.113	3.6	0.138	4.5
Hispanic	0.102	1.5	0.029	0.5	0.106	1.9	0.028	0.5
Indian	-0.064	-0.5	-0.042	-0.4	0.129	1.2	0.095	0.9
Oriental	-0.276	-3.0	-0.170	-2.4	-0.175	-2.4	-0.095	-1.3
Other minority	0.062	0.8	-0.036	-0.6	-0.024	-0.4	0.019	0.3
Region								
Northeast	0.039	1.2	0.018	0.7	-0.011	-0.4	-0.006	-0.2
South	0.125	3.8	0.017	0.7	0.021	0.8	0.021	0.8
West	0.087	2.3	0.033	1.1	0.013	0.4	0.041	1.4
High school measures								
Ability	0.0017	3.1	0.0009	2.1	0.0011	2.4	0.0020	4.5
Percentile rank in class	0.0025	4.4	0.0012	2.6	0.0000	0.0	0.0008	1.8
Academic program	0.073	2.3	0.067	2.8	0.055	2.2	0.080	3.3
Vocational-technical program	0.035	1.0	-0.006	-0.2	-0.022	-0.8	0.007	0.2
Family background								
Father's education	0.0176	2.9	0.0032	0.7	0.0061	1.2	-0.0017	-0.4
Mother's education	0.0031	0.4	-0.0014	-0.2	0.0070	1.1	0.0088	1.5
Father's occupation (SEI)	-0.0007	-1.1	0.0007	1.4	0.0010	2.0	0.0008	1.7
Mother's professional status	-0.034	-0.8	0.038	1.2	0.008	0.2	-0.045	-1.4
Mother's homemaker status	0.032	1.2	0.030	1.4	-0.014	-0.6	-0.001	-0.1
R^2	0.052		0.023		0.022		0.032	
S	0.675		0.588		0.614		0.603	
F	10.5		5.6		5.3		8.3	
N	3294		4091		4110		4234	
MALES								
Constant	3.88	40.3	3.84	49.0	3.89	47.2	4.01	50.0
Race/Ethnicity								
Black	0.111	3.2	0.086	3.0	0.119	4.0	0.046	1.6
Hispanic	-0.050	-0.9	-0.007	-0.2	0.081	1.8	0.062	1.4
Indian	0.019	0.2	-0.015	-0.2	0.116	1.4	0.017	0.2
Oriental	-0.210	-3.1	-0.160	-2.9	-0.219	-3.7	-0.270	-4.7
Other minority	-0.031	-0.5	-0.071	-1.4	-0.087	-1.6	-0.082	-1.5
Region								
Northeast	0.024	0.9	0.007	0.3	-0.023	-1.0	0.012	0.5
South	0.057	2.2	-0.002	-0.1	0.004	0.2	0.005	0.2
West	0.131	4.5	0.056	2.4	0.044	1.8	0.042	1.7
High school measures								
Ability	-0.0010	-2.5	0.0004	1.2	0.0002	0.5	0.0002	0.7
Percentile rank in class	0.0030	7.1	0.0005	1.6	0.0005	1.3	0.0005	1.3
Academic program	0.086	3.6	0.027	1.4	0.063	3.1	0.039	1.9
Vocational-technical program	-0.009	-0.3	0.008	0.3	0.070	2.8	-0.004	-0.2
Family background								
Father's education	0.0040	0.8	0.0048	1.2	0.0028	0.7	0.0170	4.2
Mother's education	0.0010	0.2	0.0071	1.4	0.0117	2.2	-0.0020	-0.4
Father's occupation (SEI)	-0.0004	-0.7	0.0003	0.6	0.0005	1.1	-0.0001	-0.3
Mother's professional status	-0.089	-2.6	-0.119	-4.3	-0.107	-3.6	-0.054	-1.9
Mother's homemaker status	0.001	0.1	-0.014	-0.8	-0.010	-0.6	-0.004	-0.2
R^2	0.032		0.012		0.016		0.015	
S	0.618		0.557		0.587		0.586	
F	8.5		3.9		5.0		5.1	
N	4325		5299		5323		5607	

Table D.18

Regression Results for the Self-Esteem Measures: Nonparents Married as of October 1973

Variable	1972 b	1972 t	1973 b	1973 t	1974 b	1974 t	1976 b	1976 t
FEMALES								
Constant	3.45	11.4	4.19	21.8	3.87	18.4	3.98	17.5
Race/Ethnicity								
Black	0.036	0.3	-0.004	-0.1	0.049	0.6	0.105	1.1
Hispanic	-0.121	-0.8	-0.089	-0.9	-0.011	-0.1	-0.010	-0.1
Region								
Northeast	-0.101	-0.9	-0.142	-2.1	-0.173	-2.3	-0.123	-1.5
South	0.091	1.2	-0.078	-1.6	-0.003	-0.1	-0.018	-0.3
West	0.052	0.5	-0.000	-0.0	0.074	1.1	0.104	1.4
High school measures								
Ability	0.0001	0.1	-0.0008	-1.0	0.0004	0.5	0.0002	0.2
Percentile rank in class	0.0015	1.1	0.0011	1.3	-0.0002	-0.2	0.0001	0.1
Academic program	-0.057	-0.7	0.088	1.7	0.034	0.6	0.083	1.3
Vocational-technical program	0.029	0.4	0.033	0.8	-0.056	-1.2	0.020	0.4
Family background								
Father's education	0.0246	1.5	0.0070	0.7	0.0164	1.5	-0.0083	-0.7
Mother's education	0.0024	0.1	0.0018	0.1	0.0015	0.1	0.0178	1.2
Father's occupation (SEI)	-0.0022	-1.4	0.0000	0.0	0.0007	0.6	0.0020	1.6
Mother's professional status	-0.031	-0.3	-0.053	-0.7	-0.028	-0.3	-0.047	-0.5
Mother's homemaker status	-0.025	-0.4	-0.124	-3.1	-0.009	-0.2	-0.043	-0.9
R^2	0.021		0.035		0.038		0.027	
S	0.688		0.487		0.532		0.595	
F	0.9		1.8		2.0		1.5	
N	579		719		716		763	
MALES								
Constant	3.29	8.6	4.25	14.0	4.28	14.5	4.21	15.2
Race/Ethnicity								
Black	0.057	0.3	0.008	0.0	0.148	1.0	0.245	1.7
Hispanic	-0.059	-0.3	-0.182	-1.2	0.158	1.1	-0.194	-1.4
Region								
Northeast	0.293	1.8	-0.020	-0.2	0.011	0.1	0.016	0.1
South	0.115	1.1	0.016	0.2	0.150	1.8	0.022	0.3
West	0.193	1.4	0.102	0.9	0.236	2.2	0.200	2.0
High school measures								
Ability	0.0040	2.4	0.0004	0.3	-0.0000	-0.0	0.0010	0.9
Percentile rank in class	-0.0012	-0.6	0.0031	2.1	0.0017	1.1	0.0030	2.2
Academic program	0.109	1.0	0.195	2.3	0.177	2.2	0.035	0.5
Vocational-technical program	0.013	0.1	0.013	0.2	-0.026	-0.3	-0.055	-0.8
Family background								
Father's education	-0.0308	-1.5	-0.0485	-3.0	-0.0392	-2.5	-0.0388	-2.7
Mother's education	0.0130	0.5	0.0270	1.4	0.0271	1.4	0.0218	1.2
Father's occupation (SEI)	0.0005	0.2	0.0008	0.5	-0.0012	-0.7	0.0023	1.5
Mother's professional status	0.039	0.3	-0.317	-2.6	-0.067	-0.6	-0.433	-3.9
Mother's homemaker status	0.047	0.5	-0.017	-0.3	0.019	0.3	-0.071	-1.1
R^2	0.070		0.131		0.110		0.138	
S	0.596		0.507		0.500		0.489	
F	1.1		2.5		2.2		3.1	
N	219		252		261		285	

Table D.19

Regression Results for the Locus of Control Measures: Single Nonparents as of October 1976

Variable	1972 b	1972 t	1973 b	1973 t	1974 b	1974 t	1976 b	1976 t
FEMALES								
Constant	2.28	19.8	2.74	27.8	2.74	27.0	2.83	28.0
Race/Ethnicity								
Black	-0.004	-0.1	-0.152	-4.9	-0.131	-4.1	-0.146	-4.6
Hispanic	0.000	0.0	0.055	1.0	0.015	0.3	0.031	0.6
Indian	-0.051	-0.4	0.009	0.1	0.061	0.6	-0.055	-0.5
Oriental	-0.125	-1.5	-0.079	-1.1	-0.148	-2.0	-0.057	-0.8
Other minority	-0.184	-2.6	-0.032	-0.5	-0.128	-2.0	-0.027	-0.4
Region								
Northeast	-0.007	-0.2	-0.055	-2.1	-0.033	-1.2	-0.075	-2.7
South	0.019	0.6	-0.011	-0.4	0.023	0.8	-0.037	-1.4
West	0.057	1.6	0.021	0.7	0.039	1.2	0.010	0.3
High school measures								
Ability	0.0067	12.8	0.0046	10.3	0.0047	10.2	0.0052	11.2
Percentile rank in class	0.0028	5.1	0.0022	4.7	0.0014	3.0	0.0007	1.6
Academic program	0.066	2.3	0.040	1.6	0.068	2.6	0.051	2.0
Vocational-technical program	-0.016	-0.5	0.004	0.2	-0.004	-0.1	-0.018	-0.6
Family background								
Father's education	0.0076	1.4	0.0134	2.8	0.0162	3.3	0.0126	2.5
Mother's education	-0.0052	-0.7	-0.0055	-0.9	-0.0068	-1.1	-0.0066	-1.1
Father's occupation (SEI)	-0.0006	-1.0	-0.0003	-0.6	-0.0006	-1.1	-0.0000	-0.0
Mother's professional status	0.018	0.5	0.005	0.2	0.038	1.1	-0.022	-0.6
Mother's homemaker status	-0.035	-1.4	-0.010	-0.5	-0.031	-1.4	-0.073	-3.4
R^2	0.183		0.131		0.123		0.125	
S	0.632		0.604		0.624		0.630	
F	43.3		36.0		33.7		35.5	
N	3293		4089		4107		4234	
MALES								
Constant	2.29	22.5	2.76	31.9	2.70	29.2	2.61	28.9
Race/Ethnicity								
Black	0.042	1.1	-0.070	-2.2	-0.116	-3.5	-0.128	-3.9
Hispanic	-0.151	-2.7	-0.120	-2.5	-0.113	-2.2	-0.056	-1.1
Indian	-0.081	-0.8	-0.245	-2.8	-0.147	-1.5	-0.204	-2.2
Oriental	-0.224	-3.1	-0.116	-1.9	-0.184	-2.8	-0.104	-1.6
Other minority	-0.219	-3.3	-0.020	-0.4	-0.098	-1.6	-0.111	-1.9
Region								
Northeast	-0.025	-0.9	-0.070	-2.9	-0.009	-0.3	-0.061	-2.4
South	-0.005	-0.2	-0.012	-0.5	0.032	1.3	-0.007	-0.3
West	0.034	1.1	0.012	0.4	0.077	2.8	0.030	1.1
High school measures								
Ability	0.0065	14.8	0.0040	10.7	0.0041	10.4	0.0047	12.2
Percentile rank in class	0.0020	4.4	0.0009	2.4	0.0006	1.6	0.0009	2.3
Academic program	0.069	2.7	0.076	3.5	0.106	4.6	0.060	2.6
Vocational-technical program	-0.030	-1.0	-0.020	-0.8	0.016	0.6	0.025	0.9
Family background								
Father's education	-0.0131	-2.6	-0.0032	-0.7	-0.0035	-0.8	0.0026	0.6
Mother's education	0.0076	1.2	0.0184	3.4	0.0149	2.5	0.0188	3.3
Father's occupation (SEI)	0.0019	3.5	0.0004	0.9	0.0011	2.2	0.0000	0.1
Mother's professional status	0.014	0.4	-0.057	-1.8	-0.064	-1.9	-0.071	-2.2
Mother's homemaker status	-0.059	-2.7	-0.020	-1.1	-0.021	-1.0	-0.015	-0.8
R^2	0.168		0.098		0.094		0.101	
S	0.653		0.613		0.659		0.660	
F	51.0		33.5		32.3		37.1	
N	4324		5291		5313		5602	

Table D.20

Regression Results for the Locus of Control Measures: Nonparents Married as of October 1973

Variable	1972 b	1972 t	1973 b	1973 t	1974 b	1974 t	1976 b	1976 t
FEMALES								
Constant	2.40	8.2	2.44	10.6	2.75	10.8	2.88	11.6
Race/Ethnicity								
Black	-0.003	-0.0	-0.124	-1.3	-0.028	-0.3	-0.093	-0.9
Hispanic	-0.172	-1.2	-0.016	-0.1	-0.136	-1.0	0.000	0.0
Region								
Northeast	-0.052	-0.5	0.007	0.1	-0.194	-2.1	-0.220	-2.5
South	-0.002	-0.0	0.043	0.7	-0.024	-0.4	-0.048	-0.8
West	0.188	2.0	0.129	1.8	0.105	1.3	0.174	2.2
High school measures								
Ability	0.0061	4.7	0.0064	6.3	0.0056	5.0	0.0064	5.9
Percentile rank in class	0.0058	4.5	0.0028	2.8	0.0041	3.6	0.0034	3.1
Academic program	0.038	0.5	0.031	0.5	0.102	1.5	-0.052	-0.8
Vocational-technical program	0.002	0.0	-0.004	-0.1	0.029	0.5	-0.018	-0.3
Family background								
Father's education	0.0080	0.5	0.0185	1.5	0.0073	0.5	-0.0173	-1.3
Mother's education	-0.0178	-0.9	-0.0068	-0.4	-0.0251	-1.5	-0.0190	-1.1
Father's occupation (SEI)	-0.0010	-0.6	-0.0012	-1.0	0.0006	0.4	0.0031	2.4
Mother's professional status	0.211	1.8	-0.076	-0.8	0.162	1.6	0.056	0.6
Mother's homemaker status	-0.075	-1.2	-0.082	-1.7	0.002	0.0	-0.046	-0.9
R^2	0.196		0.174		0.160		0.166	
S	0.664		0.584		0.646		0.647	
F	9.8		10.6		9.5		10.6	
N	577		720		715		763	
MALES								
Constant	1.70	3.9	2.20	5.2	2.82	7.1	2.90	7.6
Race/Ethnicity								
Black	0.248	1.1	-0.436	-1.9	-0.229	-1.1	-0.311	-1.5
Hispanic	0.139	0.6	-0.309	-1.5	-0.117	-0.6	-0.422	-2.3
Region								
Northeast	-0.199	-1.1	0.159	0.9	0.102	0.6	0.016	0.1
South	-0.064	-0.5	0.043	0.4	-0.143	-1.3	0.102	1.0
West	0.147	0.9	0.264	1.7	0.168	1.2	0.095	0.7
High school measures								
Ability	0.0124	6.6	0.0078	4.2	0.0070	4.1	0.0058	3.5
Percentile rank in class	-0.0023	-1.1	-0.0022	-1.0	-0.0025	-1.3	0.0018	1.0
Academic program	-0.055	-0.5	0.098	0.8	0.176	1.6	0.163	1.5
Vocational-technical program	-0.110	-0.9	0.139	1.2	-0.036	-0.3	0.127	1.2
Family background								
Father's education	-0.0713	-3.1	-0.0066	-0.3	0.0045	0.2	0.0070	0.3
Mother's education	0.0198	0.7	0.0241	0.9	-0.0294	-1.1	-0.0327	-1.3
Father's occupation (SEI)	0.0068	2.7	-0.0025	-1.0	-0.0012	-0.5	-0.0002	-0.1
Mother's professional status	-0.230	-1.3	-0.132	-0.8	0.253	1.6	0.138	0.9
Mother's homemaker status	0.094	0.9	-0.097	-1.0	0.114	1.3	-0.046	-0.5
R^2	0.272		0.152		0.170		0.145	
S	0.680		0.708		0.671		0.675	
F	5.5		3.0		3.6		3.3	
N	219		251		261		285	

Table D.21

Regression Results for the Work Orientation Measures: Single Nonparents as of October 1976

Variable	1972 b	1972 t	1973 b	1973 t	1974 b	1974 t	1976 b	1976 t
FEMALES								
Constant	3.02	47.9	2.82	48.4	2.90	48.3	2.61	44.6
Race/Ethnicity								
Black	0.040	2.0	0.109	5.9	0.087	4.6	0.083	4.5
Hispanic	0.005	0.1	0.130	4.0	0.041	1.2	0.057	1.7
Indian	0.069	1.0	0.022	0.3	-0.032	-0.5	-0.025	-0.4
Oriental	0.091	1.9	0.156	3.6	0.120	2.7	0.097	2.3
Other minority	-0.124	-3.2	-0.011	-0.3	-0.036	-1.0	-0.081	-2.2
Region								
Northeast	0.006	0.3	0.014	0.9	0.027	1.7	-0.003	-0.2
South	0.054	3.2	0.037	2.4	0.031	2.0	0.036	2.3
West	0.020	1.0	-0.053	-2.9	-0.011	-0.6	-0.011	-0.6
High school measures								
Ability	-0.0025	-8.9	-0.0018	-7.0	-0.0026	-9.4	-0.0011	-4.0
Percentile rank in class	0.0004	1.5	0.0003	1.1	0.0004	1.2	-0.0003	-1.2
Academic program	0.044	2.8	0.036	2.4	0.041	2.7	0.050	3.4
Vocational-technical program	0.065	3.6	-0.006	-0.4	0.026	1.5	0.001	0.1
Family background								
Father's education	-0.0030	-1.0	-0.0056	-2.0	-0.0021	-0.7	0.0033	1.1
Mother's education	-0.0042	-1.1	-0.0003	-0.1	-0.0004	-0.1	-0.0007	-0.2
Father's occupation (SEI)	-0.0006	-1.7	-0.0002	-0.6	-0.0004	-1.2	-0.0003	-1.1
Mother's professional status	0.009	0.4	0.001	0.1	-0.002	-0.1	-0.006	-0.3
Mother's homemaker status	-0.025	-1.8	-0.037	-2.9	-0.015	-1.2	-0.010	-0.8
R^2	0.086		0.068		0.070		0.030	
S	0.347		0.357		0.369		0.365	
F	18.1		17.5		18.1		7.6	
N	3297		4101		4103		4236	
MALES								
Constant	3.01	52.1	2.93	56.7	3.06	57.7	2.92	59.3
Race/Fthnicity								
Black	0.015	0.7	0.059	3.1	0.058	3.0	0.061	3.4
Hispanic	-0.047	-1.5	0.011	0.4	-0.002	-0.1	0.018	0.7
Indian	-0.084	-1.4	-0.114	-2.1	-0.059	-1.1	0.047	0.9
Oriental	0.018	0.4	0.105	2.8	0.058	1.5	0.080	2.3
Other minority	-0.111	-2.9	-0.077	-2.3	-0.080	-2.3	-0.028	-0.9
Region								
Northeast	-0.024	-1.5	0.022	1.5	0.018	1.2	0.038	2.8
South	0.013	0.8	0.014	1.0	0.030	2.1	0.028	2.2
West	-0.019	-1.1	-0.020	-1.3	-0.013	-0.8	-0.043	-2.9
High school measures								
Ability	-0.0019	-7.6	-0.0022	-9.8	-0.0021	-9.1	-0.0019	-9.2
Percentile rank in class	0.0002	0.9	0.0004	1.9	-0.0005	-1.9	-0.0003	-1.2
Academic program	0.052	3.6	0.008	0.6	0.007	0.5	0.033	2.6
Vocational-technical program	0.041	2.4	-0.000	-0.0	0.011	0.7	0.001	0.1
Family background								
Father's education	-0.0118	-4.0	-0.0073	-2.8	-0.0137	-5.1	-0.0047	-1.9
Mother's education	0.0049	1.3	0.0046	1.4	-0.0018	-0.5	0.0000	0.0
Father's occupation (SEI)	0.0002	0.6	0.0001	0.2	0.0005	1.8	0.0002	0.8
Mother's professional status	-0.016	-0.8	-0.004	-0.2	0.027	1.4	0.007	0.4
Mother's homemaker status	0.005	0.4	0.019	1.7	0.031	2.7	0.014	1.3
R^2	0.038		0.048		0.069		0.049	
S	0.371		0.367		0.376		0.360	
F	9.9		15.5		23.2		16.9	
N	4329		5308		5304		5609	

Table D.22

Regression Results for the Work Orientation Measures: Nonparents Married as of October 1973

Variable	1972 b	1972 t	1973 b	1973 t	1974 b	1974 t	1976 b	1976 t
FEMALES								
Constant	3.01	20.1	2.72	17.7	3.01	19.8	2.42	15.6
Race/Ethnicity								
Black	0.051	0.8	0.089	1.4	0.059	0.9	0.122	1.9
Hispanic	0.080	1.1	-0.054	-0.7	0.052	0.7	0.067	0.8
Region								
Northeast	-0.060	-1.1	-0.093	-1.7	-0.094	-1.7	-0.080	-1.4
South	0.034	0.9	0.093	2.4	0.020	0.5	0.075	1.9
West	-0.061	-1.3	0.026	0.5	-0.011	-0.2	0.081	1.6
High school measures								
Ability	-0.0023	-3.5	-0.0021	-3.1	-0.0028	-4.2	-0.0009	-1.3
Percentile rank in class	0.0001	0.1	-0.0001	-0.1	0.0005	0.7	-0.0013	-1.9
Academic program	0.069	1.7	0.119	2.9	0.078	1.9	0.100	2.4
Vocational-technical program	0.055	1.6	0.026	0.8	0.045	1.3	0.027	0.8
Family background								
Father's education	-0.0125	-1.6	0.0009	0.1	-0.0010	-0.1	-0.0121	-1.5
Mother's education	0.0035	0.4	0.0017	0.2	-0.0011	-0.1	0.0234	2.2
Father's occupation (SEI)	0.0000	0.0	-0.0012	-1.5	-0.0015	-1.8	0.0001	0.1
Mother's professional status	-0.080	-1.3	-0.083	-1.3	-0.053	-0.9	-0.097	-1.5
Mother's homemaker status	-0.060	-1.9	-0.090	-2.8	-0.128	-4.1	-0.125	-3.9
R^2	0.090		0.076		0.089		0.074	
S	0.341		0.392		0.383		0.406	
F	4.0		4.1		4.8		4.2	
N	577		721		710		761	
MALES								
Constant	2.51	12.0	2.78	14.0	2.41	12.7	2.66	15.2
Race/Ethnicity								
Black	-0.108	-1.0	-0.208	-2.0	0.016	0.2	0.026	0.3
Hispanic	-0.046	-0.4	0.196	2.0	0.019	0.2	-0.046	-0.5
Region								
Northeast	-0.036	-0.4	0.023	0.3	0.155	1.9	0.078	1.0
South	0.111	1.9	0.122	2.2	0.092	1.7	0.102	2.1
West	0.059	0.8	-0.103	-1.4	-0.038	-0.5	0.090	1.4
High school measures								
Ability	-0.0000	-0.0	-0.0011	-1.2	0.0004	0.5	-0.0004	-0.6
Percentile rank in class	-0.0015	-1.4	-0.0010	-1.0	-0.0020	-2.2	-0.0006	-0.7
Academic program	0.004	0.1	0.050	0.9	0.041	0.8	0.030	0.6
Vocational-technical program	0.065	1.2	-0.060	-1.1	0.023	0.4	-0.006	-0.1
Family background								
Father's education	-0.0007	-0.1	0.0088	0.8	-0.0096	-1.0	0.0125	1.4
Mother's education	0.0208	1.5	-0.0096	-0.7	0.0184	1.5	-0.0100	-0.9
Father's occupation (SEI)	-0.0018	-1.5	-0.0013	-1.1	-0.0011	-1.0	-0.0010	-1.0
Mother's professional status	-0.187	-2.2	0.121	1.5	-0.189	-2.5	-0.016	-0.2
Mother's homemaker status	-0.065	-1.4	0.022	0.5	0.055	1.3	-0.108	-2.7
R^2	0.084		0.104		0.100		0.052	
S	0.324		0.331		0.321		0.310	
F	1.3		2.0		1.9		1.1	
N	220		252		260		287	

Table D.23

Regression Results for the Community Orientation Measures: Single Nonparents as of October 1976

Variable	1972 b	1972 t	1973 b	1973 t	1974 b	1974 t	1976 b	1976 t
FEMALES								
Constant	2.38	30.3	2.35	34.7	2.48	35.9	2.38	34.5
Race/Ethnicity								
Black	0.206	8.3	0.230	10.7	0.195	8.9	0.219	10.0
Hispanic	0.162	3.7	0.181	4.8	0.136	3.5	0.203	5.3
Indian	0.232	2.7	0.055	0.7	0.007	0.1	0.072	1.0
Oriental	0.065	1.1	-0.018	-0.4	-0.065	-1.3	-0.010	-0.2
Other minority	0.011	0.2	0.021	0.5	0.083	1.9	0.044	1.0
Region								
Northeast	-0.047	-2.2	-0.012	-0.6	-0.012	-0.7	-0.018	-1.0
South	0.055	2.6	0.109	6.1	0.087	4.8	0.058	3.2
West	-0.094	-3.8	-0.042	-2.0	-0.029	-1.3	-0.027	-1.2
High school measures								
Ability	-0.0011	-3.0	-0.0010	-3.3	-0.0023	-7.3	-0.0020	-6.3
Percentile rank in class	0.0003	0.8	-0.0006	-1.9	-0.0001	-0.4	-0.0002	-0.6
Academic program	0.074	3.7	0.047	2.7	0.072	4.1	0.061	3.5
Vocational-technical program	0.004	0.2	-0.032	-1.6	-0.059	-2.9	-0.017	-0.8
Family background								
Father's education	-0.0038	-1.0	-0.0067	-2.0	-0.0135	-4.0	-0.0057	-1.7
Mother's education	-0.0027	-0.6	-0.0030	-0.7	0.0092	2.1	-0.0006	-0.1
Father's occupation (SEI)	-0.0005	-1.2	-0.0006	-1.6	0.0000	0.1	-0.0003	-0.7
Mother's professional status	0.012	0.4	0.005	0.2	-0.063	-2.7	-0.014	-0.6
Mother's homemaker status	-0.035	-2.1	-0.029	-1.9	-0.048	-3.2	-0.007	-0.5
R^2	0.076		0.107		0.106		0.096	
S	0.431		0.416		0.425		0.431	
F	15.8		28.8		28.6		26.3	
N	3293		4095		4100		4235	
MALES								
Constant	2.70	37.9	2.63	41.8	2.62	41.1	2.61	41.5
Race/Ethnicity								
Black	0.166	6.4	0.222	9.8	0.231	10.0	0.310	13.6
Hispanic	0.123	3.2	0.158	4.6	0.164	4.7	0.145	4.2
Indian	-0.015	-0.2	-0.005	-0.1	0.021	0.3	-0.024	-0.4
Oriental	0.041	0.8	0.059	1.3	0.007	0.2	0.081	1.8
Other minority	-0.021	-0.5	0.053	1.3	0.071	1.7	0.043	1.0
Region								
Northeast	-0.033	-1.6	0.005	0.3	-0.014	-0.8	0.008	0.5
South	0.060	3.2	0.096	5.8	0.095	5.6	0.072	4.4
West	-0.068	-3.2	-0.027	-1.4	-0.032	-1.7	-0.045	-2.4
High school measures								
Ability	-0.0026	-8.5	-0.0029	-10.8	-0.0030	-11.0	-0.0035	-13.1
Percentile rank in class	0.0007	2.4	0.0008	2.7	0.0004	1.4	0.0005	1.8
Academic program	0.091	5.1	0.026	1.7	0.051	3.2	0.081	5.2
Vocational-technical program	-0.015	-0.7	-0.045	-2.4	-0.040	-2.1	-0.034	-1.8
Family background								
Father's education	-0.0142	-4.0	-0.0067	-2.1	-0.0041	-1.3	0.0004	0.1
Mother's education	-0.0017	-0.4	-0.0035	-0.9	-0.0033	-0.8	-0.0019	-0.5
Father's occupation (SEI)	0.0007	1.7	0.0008	2.3	0.0000	0.0	0.0004	1.0
Mother's professional status	0.034	1.4	-0.008	-0.4	-0.023	-1.0	-0.047	-2.1
Mother's homemaker status	0.024	1.5	-0.004	-0.3	0.024	1.8	0.000	0.0
R^2	0.073		0.094		0.105		0.119	
S	0.457		0.446		0.452		0.459	
F	19.9		32.3		36.4		44.3	
N	4318		5295		5299		5604	

Table D.24

Regression Results for the Community Orientation Measures: Nonparents Married as of October 1973

Variable	1972 b	1972 t	1973 b	1973 t	1974 b	1974 t	1976 b	1976 t
FEMALES								
Constant	2.63	14.4	2.50	15.1	2.82	18.0	2.39	14.9
Race/Ethnicity								
Black	0.210	2.8	0.185	2.7	0.140	2.2	0.188	2.8
Hispanic	-0.034	-0.4	0.096	1.1	-0.127	-1.6	0.124	1.5
Region								
Northeast	-0.178	-2.7	-0.043	-0.7	-0.114	-2.0	-0.027	-0.5
South	0.022	0.5	0.070	1.7	0.037	0.9	0.080	2.0
West	-0.095	-1.6	-0.075	-1.4	-0.104	-2.1	-0.012	-0.2
High school measures								
Ability	-0.0018	-2.3	-0.0032	-4.4	-0.0038	-5.6	-0.0032	-4.4
Percentile rank in class	0.0009	1.1	0.0005	0.6	0.0002	0.3	-0.0009	-1.3
Academic program	0.084	1.7	0.029	0.7	0.094	2.2	0.142	3.3
Vocational-technical program	-0.007	-0.2	-0.008	-0.2	-0.081	-2.3	-0.020	-0.6
Family background								
Father's education	-0.0217	-2.2	-0.0063	-0.7	-0.0035	-0.4	-0.0100	-1.2
Mother's education	0.0135	1.1	0.0160	1.4	0.0023	0.2	0.0236	2.2
Father's occupation (SEI)	-0.0012	-1.3	-0.0005	-0.5	-0.0010	-1.2	-0.0004	-0.5
Mother's professional status	-0.046	-0.6	-0.054	-0.8	-0.032	-0.5	-0.119	-1.8
Mother's homemaker status	-0.042	-1.1	0.018	0.5	-0.012	-0.4	-0.005	-0.1
R^2	0.095		0.094		0.123		0.111	
S	0.417		0.421		0.395		0.418	
F	4.2		5.2		7.0		6.7	
N	577		722		709		760	
MALES								
Constant	2.24	7.7	2.73	11.2	2.30	9.9	2.41	9.2
Race/Ethnicity								
Black	0.093	0.6	-0.035	-0.3	0.081	0.7	0.098	0.7
Hispanic	0.062	0.4	0.245	2.1	-0.001	-0.0	0.255	2.0
Region								
Northeast	-0.199	-1.6	-0.061	-0.6	0.052	0.5	0.059	0.5
South	0.250	3.1	0.199	2.9	0.269	4.2	0.205	2.8
West	0.050	0.5	0.071	0.8	0.104	1.2	-0.007	-0.1
High school measures								
Ability	-0.0035	-2.8	-0.0033	-3.1	-0.0024	-2.4	-0.0020	-1.7
Percentile rank in class	0.0028	1.9	-0.0007	-0.6	0.0007	0.6	-0.0016	-1.2
Academic program	-0.072	-0.9	0.037	0.5	-0.038	-0.6	0.052	0.7
Vocational-technical program	0.046	0.6	-0.041	-0.6	-0.129	-2.1	-0.101	-1.5
Family background								
Father's education	0.0073	0.5	-0.0046	-0.4	-0.0200	-1.6	-0.0060	-0.4
Mother's education	0.0279	1.5	0.0010	0.1	0.0141	0.9	-0.0073	-0.4
Father's occupation (SEI)	-0.0015	-0.9	-0.0006	-0.4	0.0025	1.8	0.0025	1.6
Mother's professional status	-0.200	-1.7	-0.250	-2.5	-0.292	-3.1	-0.072	-0.7
Mother's homemaker status	0.097	1.5	0.055	1.0	0.040	0.8	-0.027	-0.5
R^2	0.207		0.189		0.183		0.102	
S	0.455		0.408		0.393		0.464	
F	3.8		4.0		3.9		2.2	
N	220		253		260		287	

Table D.25

Regression Results for the Family Orientation Measures: Single Nonparents as of October 1976

Variable	1972 b	1972 t	1973 b	1973 t	1974 b	1974 t	1976 b	1976 t
FEMALES								
Constant	1.10	14.7	1.04	17.4	1.28	20.8	1.25	21.0
Race/Ethnicity								
Black	-0.090	-3.8	-0.074	-3.9	-0.148	-7.6	-0.118	-6.3
Hispanic	0.012	0.3	0.038	1.1	-0.027	-0.8	-0.023	-0.7
Indian	-0.036	-0.4	-0.022	-0.3	-0.085	-1.3	-0.050	-0.8
Oriental	0.014	0.3	-0.012	-0.3	-0.004	-0.1	0.038	0.9
Other minority	-0.140	-3.0	-0.068	-1.8	-0.081	-2.1	-0.077	-2.1
Region								
Northeast	0.033	1.7	0.034	2.1	0.037	2.2	0.013	0.8
South	0.079	4.0	0.047	3.0	0.058	3.6	0.040	2.6
West	0.061	2.6	0.037	2.0	0.041	2.1	0.024	1.3
High school measures								
Ability	-0.0011	-3.2	-0.0009	-3.2	-0.0018	-6.4	-0.0016	-5.9
Percentile rank in class	0.0013	3.7	0.0009	3.2	0.0016	5.3	0.0014	5.0
Academic program	0.025	1.3	0.009	0.6	-0.014	-0.9	0.010	0.6
Vocational-technical program	0.038	1.8	0.028	1.6	0.029	1.6	0.022	1.3
Family background								
Father's education	-0.0019	-0.5	-0.0007	-0.2	0.0001	0.0	0.0002	0.1
Mother's education	-0.0033	-0.7	0.0044	1.2	0.0002	0.0	0.0011	0.3
Father's occupation (SEI)	-0.0009	-2.4	-0.0001	-0.2	-0.0002	-0.6	0.0002	0.7
Mother's professional status	-0.000	-0.0	-0.035	-1.7	0.018	0.8	-0.019	-1.0
Mother's homemaker status	0.056	3.4	0.034	2.6	0.016	1.2	0.006	0.5
R^2	0.029		0.015		0.029		0.019	
S	0.408		0.365		0.375		0.369	
F	5.8		3.7		7.0		4.9	
N	3260		4049		4063		4207	
MALES								
Constant	1.07	16.3	1.20	23.2	1.22	23.0	1.28	25.5
Race/Ethnicity								
Black	-0.075	-3.2	-0.098	-5.2	-0.125	-6.5	-0.121	-6.7
Hispanic	0.080	2.2	-0.002	-0.1	0.024	0.8	-0.026	-1.0
Indian	-0.094	-1.4	-0.028	-0.5	-0.148	-2.7	-0.082	-1.6
Oriental	0.081	1.7	0.053	1.4	0.020	0.5	0.023	0.6
Other minority	-0.017	-0.4	-0.058	-1.7	-0.003	-0.1	-0.044	-1.3
Region								
Northeast	0.020	1.1	0.034	2.3	0.040	2.7	0.020	1.4
South	0.079	4.5	0.061	4.4	0.076	5.4	0.069	5.2
West	0.001	0.1	0.012	0.7	0.021	1.3	0.025	1.7
High school measures								
Ability	-0.0008	-2.8	-0.0015	-6.5	-0.0010	-4.6	-0.0014	-6.4
Percentile rank in class	0.0009	3.1	0.0007	3.2	0.0004	1.9	0.0009	4.0
Academic program	0.028	1.7	0.039	3.0	0.014	1.0	0.013	1.1
Vocational-technical program	-0.008	-0.4	0.017	1.1	0.007	0.4	-0.008	-0.5
Family background								
Father's education	-0.0123	-3.7	-0.0046	-1.8	-0.0104	-3.9	-0.0057	-2.3
Mother's education	0.0046	1.1	0.0056	1.7	0.0038	1.1	0.0022	0.7
Father's occupation (SEI)	0.0000	0.1	-0.0007	-2.6	-0.0004	-1.5	-0.0008	-3.0
Mother's professional status	-0.014	-0.6	-0.007	-0.4	0.015	0.8	0.027	1.5
Mother's homemaker status	0.029	2.0	0.037	3.3	0.049	4.2	0.040	3.7
R^2	0.021		0.024		0.028		0.027	
S	0.417		0.366		0.375		0.364	
F	5.4		7.7		9.0		9.0	
N	4264		5217		5255		5547	

Table D.26

Regression Results for the Family Orientation Measures: Nonparents Married as of October 1973

Variable	1972 b	1972 t	1973 b	1973 t	1974 b	1974 t	1976 b	1976 t
FEMALES								
Constant	1.25	7.8	1.04	8.1	1.33	10.0	1.12	8.0
Race/Ethnicity								
Black	-0.101	-1.5	-0.121	-2.3	-0.135	-2.5	-0.117	-2.0
Hispanic	-0.131	-1.6	0.067	1.0	-0.074	-1.1	-0.013	-0.2
Region								
Northeast	-0.086	-1.5	-0.092	-2.0	-0.109	-2.3	-0.104	-2.1
South	0.066	1.7	0.006	0.2	0.010	0.3	-0.009	-0.2
West	-0.021	-0.4	-0.062	-1.5	0.003	0.1	-0.050	-1.1
High school measures								
Ability	0.0002	0.3	-0.0000	-0.0	-0.0008	-1.4	0.0002	0.4
Percentile rank in class	0.0001	0.1	0.0010	1.9	0.0015	2.6	0.0014	2.2
Academic program	0.081	1.9	0.080	2.3	0.012	0.3	-0.015	-0.4
Vocational-technical program	0.102	2.8	0.085	3.0	0.048	1.6	0.002	0.1
Family background								
Father's education	-0.0288	-3.4	-0.0048	-0.7	-0.0031	-0.4	-0.0175	-2.4
Mother's education	-0.0119	-1.1	0.0032	0.4	-0.0105	-1.2	0.0052	0.6
Father's occupation (SEI)	0.0007	0.9	-0.0006	-0.8	0.0007	1.0	0.0008	1.1
Mother's professional status	0.162	2.5	0.089	1.7	0.084	1.6	0.028	0.5
Mother's homemaker status	0.021	0.6	0.058	2.2	0.037	1.3	0.016	0.5
R^2	0.080		0.053		0.041		0.034	
S	0.362		0.319		0.332		0.364	
F	3.4		2.7		2.1		1.9	
N	570		695		700		756	
MALES								
Constant	0.82	3.4	1.10	5.6	1.24	6.1	1.26	6.8
Race/Ethnicity								
Black	-0.123	-1.0	-0.137	-1.3	-0.070	-0.7	-0.050	-0.5
Hispanic	0.086	0.7	0.037	0.4	0.125	1.3	-0.059	-0.7
Region								
Northeast	0.100	1.0	0.013	0.1	-0.046	-0.5	0.066	0.8
South	0.152	2.3	0.075	1.4	-0.054	-0.9	0.113	2.2
West	-0.000	-0.0	0.017	0.2	-0.110	-1.5	0.034	0.5
High school measures								
Ability	0.0016	1.5	-0.0000	-0.0	0.0004	0.5	0.0004	0.5
Percentile rank in class	-0.0012	-1.0	0.0001	0.1	-0.0006	-0.6	-0.0002	-0.2
Academic program	-0.093	-1.4	-0.070	-1.3	0.047	0.8	0.016	0.3
Vocational-technical program	-0.101	-1.6	-0.009	-0.2	0.038	0.7	0.025	0.5
Family background								
Father's education	-0.0291	-2.3	-0.0132	-1.3	-0.0153	-1.4	-0.0075	-0.8
Mother's education	0.0210	1.3	0.0091	0.7	-0.0011	-0.1	-0.0194	-1.6
Father's occupation (SEI)	-0.0005	-0.4	-0.0003	-0.3	0.0001	0.1	-0.0002	-0.2
Mother's professional status	-0.204	-2.1	0.018	0.2	0.058	0.7	0.003	0.0
Mother's homemaker status	-0.036	-0.7	-0.021	-0.5	-0.010	-0.2	-0.079	-1.9
R^2	0.102		0.038		0.038		0.061	
S	0.370		0.322		0.344		0.325	
F	1.6		0.7		0.7		1.2	
N	216		247		258		281	

Table D.27

Regression Results for the Sex Role Attitude Measures: Single Nonparents as of October 1976

Variable	Measure A b	Measure A t	Measure B b	Measure B t
FEMALES				
Constant	3.30	38.9	1.56	19.9
Race/Ethnicity				
Black	-0.244	-9.1	0.124	5.0
Hispanic	-0.252	-5.3	0.227	5.2
Indian	0.011	0.1	0.056	0.7
Oriental	0.101	1.6	-0.035	-0.6
Other minority	-0.011	-0.2	0.096	2.0
Region				
Northeast	-0.004	-0.2	0.023	1.1
South	0.046	2.0	-0.030	-1.4
West	-0.023	-0.8	0.067	2.8
High school measures				
Ability	-0.0051	-13.3	0.0047	13.2
Percentile rank in class	0.0001	0.1	-0.0015	-4.0
Academic program	-0.045	-2.1	0.058	2.9
Vocational-technical program	0.028	1.2	0.017	0.7
Family background				
Father's education	-0.0084	-2.0	0.0019	0.5
Mother's education	-0.0049	-0.9	0.0069	1.4
Father's occupation (SEI)	-0.0004	-1.0	-0.0003	-0.7
Mother's professional status	-0.019	-0.7	0.050	1.9
Mother's homemaker status	0.088	4.8	-0.044	-2.6
R^2	0.137		0.101	
S	0.505		0.465	
F	36.0		25.4	
N	3859		3859	
MALES				
Constant	3.13	45.0	1.86	30.0
Race/Ethnicity				
Black	-0.180	-7.1	0.150	6.6
Hispanic	-0.087	-2.3	0.180	5.3
Indian	-0.150	-2.1	-0.000	-0.0
Oriental	-0.139	-2.8	0.156	3.5
Other minority	-0.072	-1.6	0.040	1.0
Region				
Northeast	-0.030	-1.5	0.029	1.7
South	0.041	2.2	-0.018	-1.1
West	-0.019	-0.9	0.041	2.2
High school measures				
Ability	-0.0031	-10.4	0.0016	5.9
Percentile rank in class	0.0004	1.4	-0.0004	-1.6
Academic program	-0.038	-2.2	0.030	1.9
Vocational-technical program	0.075	3.6	-0.012	-0.7
Family background				
Father's education	-0.0031	-0.9	0.0011	0.4
Mother's education	-0.0078	-1.8	0.0147	3.7
Father's occupation (SEI)	-0.0013	-3.5	0.0004	1.3
Mother's professional status	0.029	1.2	-0.004	-0.2
Mother's homemaker status	0.089	5.9	-0.008	-0.6
R^2	0.089		0.038	
S	0.477		0.425	
F	28.2		11.5	
N	4912		4912	

Table D.28

Regression Results for the Sex Role Attitude Measures: Nonparents Married as of October 1973

Variable	Measure A b	Measure A t	Measure B b	Measure B t
FEMALES				
Constant	3.30	16.5	2.25	12.7
Race/Ethnicity				
Black	-0.111	-1.3	0.129	1.8
Hispanic	-0.228	-2.2	0.150	1.7
Region				
Northeast	-0.162	-2.2	0.108	1.7
South	0.004	0.1	0.015	0.3
West	-0.089	-1.4	0.021	0.4
High school measures				
Ability	-0.0033	-3.7	0.0012	1.5
Percentile rank in class	-0.0021	-2.3	-0.0009	-1.1
Academic program	-0.002	-0.0	0.045	0.9
Vocational-technical program	-0.013	-0.3	-0.050	-1.3
Family background				
Father's education	-0.0109	-1.0	0.0069	0.7
Mother's education	-0.0212	-1.6	-0.0137	-1.2
Father's occupation (SEI)	0.0004	0.4	0.0026	2.8
Mother's professional status	0.160	2.0	0.042	0.6
Mother's homemaker status	0.093	2.2	-0.050	-1.4
R^2	0.107		0.052	
S	0.500		0.442	
F	5.8		2.7	
N	695		695	
MALES				
Constant	2.49	8.4	2.07	8.6
Race/Ethnicity				
Black	0.044	0.3	0.211	1.6
Hispanic	0.162	1.1	0.143	1.2
Region				
Northeast	-0.107	-0.8	0.082	0.8
South	0.144	1.7	-0.108	-1.6
West	0.029	0.3	-0.088	-1.0
High school measures				
Ability	-0.0001	-0.1	0.0025	2.4
Percentile rank in class	-0.0046	-3.1	-0.0004	-0.3
Academic program	-0.017	-0.2	-0.003	-0.0
Vocational-technical program	-0.019	-0.2	-0.065	-1.0
Family background				
Father's education	-0.0130	-0.8	-0.0210	-1.7
Mother's education	0.0052	0.3	0.0163	1.0
Father's occupation (SEI)	0.0006	0.3	-0.0012	-0.9
Mother's professional status	-0.080	-0.7	-0.074	-0.8
Mother's homemaker status	0.136	2.0	-0.037	-0.7
R^2	0.115		0.083	
S	0.495		0.402	
F	2.2		1.5	
N	252		252	

Appendix E

DEVELOPMENT OF THE CAREER ASPIRATION INDEX

On each of three follow-up surveys (1973, 1974, and 1976), NLS respondents were asked, "What kind of work will you be doing when you are 30 years old?" Respondents were instructed to choose one of 16 occupational groupings, or a category labeled "NOT WORKING."

For analytic purposes, it is desirable to assign scores to these categories that will accurately represent their relative socioeconomic standing. The measures most commonly used for this purpose are the Duncan SEI scores (Blau and Duncan, 1967). These are based on prestige ratings of a set of occupations, regressed on measures of income and education for those occupations, and adjusted for differences in occupational age distributions.

Levinsohn et al. (1978) provide average Duncan SEI scores for the 14 categories used in the base year questionnaire (but not for the additional categories used in the follow-up questionnaires). These scores have a number of shortcomings, however:

1. Prestige ratings are available only for occupations in the paid civilian labor force. Those who aspire to careers in military service or as homemakers cannot be compared with other aspirants, nor can one quantify *changes* that involve these careers.

2. The average score for an occupational category depends—often quite heavily—on how individual occupations in that category are weighted. The scores provided by Levinsohn et al. are apparently unweighted averages of "representative" occupations in each category. The accuracy of the average scores naturally depends on whether these occupations have been well chosen and suitably weighted.

3. Professional categories are treated differently at baseline and at follow-up. The single baseline category was replaced by three new categories (including "schoolteacher") in the follow-up surveys.

These problems led us to develop the career aspiration index, based on canonical correlation between occupational aspirations (as measured in the first follow-up survey) and a set of background characteristics known to influence aspirations. Application of the canonical correlation technique to this problem seems quite natural, but the technique has not (so far as we know) previously been used to scale occupational *aspirations*—although it has been used to study the relationship between the occupational *attainments* of fathers and sons (Klatzky and Hodge, 1971).

Our career aspiration index, CARASP, provides scores for each of the 16 occupational categories measured in the follow-up surveys. Those scores are

given in Table 7.1 of the text, along with the average Duncan SEI scores for those categories as reported by Levinsohn et al. (1978).

Choosing index scores $a_1, a_2, \ldots, a_{16}$ for the 16 occupational groups amounts to specifying the value of a variable $Y = \Sigma\, a_i U_i$, where U_i is an indicator variable having the value 1 for respondents who chose the i^{th} occupational group. It was our intent to choose the coefficients a_i in such a way that the occupational index score Y would be well predicted by a linear combination of background characteristics known to be associated with occupational aspirations. In constructing the index, we used the NLS respondents' occupational choices in the first follow-up survey and the following background characteristics derived from the base year data:

SEIFAOCP	—	Duncan SEI score of father's occupation
EDPA	—	Father's educational attainment
EDMA	—	Mother's educational attainment
LNFAMINC	—	Logarithm of family income
GPA	—	High school grade point average
ABLE	—	Scholastic ability measure
RANK	—	Percentile rank in senior class

The choice of occupational index in Table 7.1 can be motivated by considering optimality criteria for specifying the variable $Y = \Sigma\, a_i U_i$ given a set of independent variables $X_1, X_2, \ldots, X_p$. A mathematically tractable criterion is the least-squares criterion, i.e., choose the coefficients a_i (and b_j) that minimize

$$SS_e = \sum_{k=1}^{n} (\Sigma_i\, a_i U_{ik} - b_o - \Sigma_j\, b_j X_{jk})^2,$$

where U_{ik} is 1 or 0 accordingly as the k^{th} respondent in a sample of size n chooses the i^{th} category or not, and X_{jk} is the value of X_j for that respondent.

In applying this criterion, one needs to impose some further constraints on the a_i's, such as requiring that the generated values Y_k of Y have mean 0 and variance 1. For a given choice of the coefficients a_i, it is well known that the minimum value of SS_e is

$$SS_e = n(1 - R^2)s_y^2 ,$$

where s_y^2 is the sample variance of Y, and R is the multiple correlation between Y and $X_1, X_2, \ldots, X_p$. Thus, for a given value of s_y^2, the choice of the a_i's that minimizes SS_e is the choice that maximizes the multiple correlation between Y and $X_1, X_2, \ldots, X_p$. The resulting choice of Y is the first canonical variate of the indicator variables $U_1, U_2, \ldots, U_{16}$ relative to the background variables $X_1, X_2, \ldots, X_p$.

The occupational index scores a_i given in Table 7.1 are the coefficients of the first canonical variate, after rescaling the values so that the "Laborer"

category has a score of 10, and the "Professional I" category has a score of 80—approximating the average Duncan SEI score for occupations in that category. The sample means, variances, and correlation coefficients needed to carry out the canonical correlation calculations were estimated using all cases on the NLS file. Means and variances were calculated from all available observations; correlation coefficients were estimated using only the cases with complete observations on a given pair of variables.

The career aspiration index was used to create four measures of career aspiration, one for each wave of the survey. CARASP73, CARASP74, and CARASP76 are the coded responses to questions FQ19, SQ142, and TQ44 in the three follow-up surveys. The "NOT WORKING" responses were coded as missing values. The fourth measure, CARASP72, is the coded response to the base year question BQ25, which asked the respondent to select the occupational category "that goes with the best description of the kind of work you would like to do." Unlike the questions on the follow-up surveys, it does not ask the respondent what type of work he or she plans to be doing *at age 30*. The occupational categories are the same as on the follow-up surveys, except that the three professional categories are reduced to a single category in BQ25. With the exception of this category, the same codes were used in creating CARASP72 from the responses to BQ25. The "Professional" category was coded 70, which is the approximate average Duncan SEI score for occupations in that category.

In interpreting the scale values, it is important to remember that they are based on respondents' stated career goals at age *30*. For some categories (e.g., military service) the scale values might have been quite different had they been based on shorter-term career goals.

Appendix F

DEVELOPMENT OF THE SEX ROLE ATTITUDE MEASURES

The 1976 NLS follow-up questionnaire includes a series of ten items (TQ150A through TQ150J) designed to measure attitudes regarding sex roles:

A. A working mother of preschool children can be just as good a mother as the woman who doesn't work.
B. It is usually better for everyone involved if the man is the achiever outside the home and the woman takes care of the family.
C. Young men should be encouraged to take jobs that are usually filled by women (nursing, secretarial work, etc.).
D. Most women are just not interested in having big and important jobs.
E. Many qualified women can't get good jobs; men with the same skills have much less trouble.
F. Most women are happiest when they are making a home and caring for children.
G. High school counselors should urge young women to train for jobs which are now held mainly by men.
H. It is more important for a wife to help her husband than to have a career herself.
I. Schools teach women to want the less important jobs.
J. Men should be given the first chance at most jobs because they have the primary responsibility for providing for a family.

Responses to these items were scored on a four-point agreement scale, recoded for our analysis as follows: 1—"Disagree strongly," ..., 4—"Agree strongly."

To investigate the factor structure of these items, we performed a factor analysis based on data from 9,048 women and 8,293 men who had provided valid responses for all ten items. Factor analyses were performed separately for men and women, with results that were virtually identical. Because the same factor structure seems to describe the responses of both sexes, below we describe only the results for women.

Using the SAS factor analysis routine, we initially extracted the first two principal components from the interitem correlation matrix. Together, these accounted for 45 percent of the variance; each of the remaining components accounted for 9 percent or less. Next, we performed a VARIMAX orthogonal rotation of the first two principal components, producing two factors which account for the same variance as the first two principal components (i.e., span the same subspace of the ten-dimensional response space), but which can be

more readily related to the responses. Table F.1 summarizes the results of this analysis. The results indicate that the data are well summarized by the two factors produced by rotating the first two principal components. Coded responses to items B, D, F, H, and J have correlations exceeding 0.56 with the first factor and below 0.20 (in absolute value) with the second factor; items C, E, G, and I have correlations above 0.58 with the second factor and below 0.22 (in absolute value) with the first factor. Question A does not correlate well with either factor. The first group of items indicates agreement with "traditional" positions regarding sex roles—especially those pertaining to family. The second group of items indicates agreement with "nontraditional" positions, especially those pertaining to sex role differentiation in careers. The factor analysis indicates that attitudes concerning these two groups of items, while negatively correlated, are not diametrically opposed; agreement with one group of items does not necessarily imply disagreement with the other. Question A, which might appear to be a "nontraditional" item, actually correlates poorly with both groups of items.

On the basis of this analysis, we created two composite summary measures: a "traditional" sex role attitude measure consisting of the average response to items B, D, F, H, and J, and a "nontraditional" sex role attitude measure consisting of the average response to items C, E, G, and I.

Table F.1

RESULTS OF FACTOR ANALYSIS OF SEX ROLE ATTITUDES AMONG FEMALE NLS RESPONDENTS

Response Variable	Standard Deviation	Factor Loadings				Scoring Coefficients			
		Principal Components		Rotated Factors		Principal Components		Rotated Factors	
		1	2	1	2	1	2	1	2
TQ150A	0.882	-0.472	0.011	-0.406	0.242	-0.535	0.012	-0.147	0.093
TQ150B	0.811	0.746	0.193	0.744	-0.199	0.920	0.238	0.340	-0.007
TQ150C	0.681	-0.442	0.500	-0.139	0.652	-0.648	0.733	0.061	0.536
TQ150D	0.699	0.422	0.394	0.561	0.135	0.604	0.563	0.358	0.235
TQ150E	0.698	-0.331	0.488	-0.048	0.588	-0.475	0.699	0.098	0.488
TQ150F	0.720	0.675	0.308	0.739	-0.064	0.938	0.428	0.408	0.102
TQ150G	0.726	-0.542	0.522	-0.215	0.722	-0.747	0.719	0.028	0.543
TQ150H	0.807	0.731	0.229	0.749	-0.160	0.906	0.284	0.386	0.022
TQ150I	0.733	-0.298	0.570	0.020	0.643	-0.407	0.777	0.143	0.522
TQ150J	0.825	0.665	0.232	0.693	-0.125	0.806	0.282	0.322	0.037

BIBLIOGRAPHY

Alexander, Karl L., and Bruce K. Eckland, "Sex Differences in the Educational Attainment Process," *American Sociological Review,* Vol. 39, 1974, pp. 668-682.

Andrisani, Paul J., and Gilbert Nestel, "Internal-External Control as Contributor to and Outcome of Work Experience," *Journal of Applied Psychology,* Vol. 61, 1976, pp. 156-165.

Bacon, Lloyd, "Early Motherhood, Accelerated Role Transition, and Social Pathologies," *Social Forces,* Vol. 52, 1974, pp. 333-341.

Baldwin, Wendy, "Adolescent Pregnancy and Childbearing—Growing Concerns for Americans," *Population Bulletin,* Vol. 31, No. 2, Population Reference Bureau, Inc., Washington, D.C., 1976.

Baldwin, Wendy, "Adolescent Pregnancy and Childbearing—An Overview," *Seminars in Perinatology,* Vol. 5, 1981, pp. 1-8.

Bantz, Karen, and Ivan Ney, "Early Marriage: A Propositional Formulation," *Journal of Marriage and the Family,* Vol. 32, 1970, pp. 252-268.

Barr, Anthony J., James H. Goodnight, John P. Sall, and Jane T. Helwig, *A User's Guide to SAS 76,* SAS Institute, Raleigh, North Carolina, 1976.

Becker, Brian E., and Stephen M. Hills, *Teenage Locus of Control and Adult Unemployment,* Ohio State University, Center for Human Resources Research, Columbus, Ohio, January 1979.

Blaschke, Thomas J., Gus W. Haggstrom, and Peter A. Morrison, *Procedures for Estimating Parenthood and Marital Status for Respondents to the National Longitudinal Study of the High School Class of 1972,* The Rand Corporation, N-1275-NICHD, August 1979.

Blau, Peter M., and Otis Dudley Duncan, *The American Occupational Structure,* John Wiley and Sons, New York, 1967.

Bonham, Gordon, and Paul Placek, "The Relationship of Maternal Health, Infant Health, and Sociodemographic Factors to Fertility," *Public Health Reports,* Vol. 93, 1978, pp. 283-292.

Brown, James C., and Bonnie R. Strickland, "Belief in Internal-External Control of Reinforcement and Participation in College Activities," *Journal of Consulting and Clinical Psychology,* Vol. 38, 1972, p. 148.

Bumpass, Larry L., et al., "Age and Marital Status at First Birth and the Pace of Subsequent Fertility," *Demography,* Vol. 15, 1978, pp. 75-86.

Busfield, Joan, "Age at Marriage and Family Size: Social Causation and Social Selection Hypotheses," *Journal of Biosocial Science,* Vol. 4, 1972, pp. 117-134.

Campbell, Donald T., and Albert Erlebacher, "How Regression Artifacts in Quasi-Experimental Evaluations Can Mistakenly Make Compensatory Education Look Harmful," in Jerome Hellmuth (ed.), *Compensatory Edu-*

cation: A National Debate: Vol. III, *Disadvantaged Child,* Brunner/Mazel, New York, 1970.

Card, Josefina J., *Consequences of Adolescent Childbearing for the Young Parent's Future Personal and Professional Life,* American Institutes for Research, Palo Alto, California, 1977.

Card, Josefina J., and Lauress L. Wise, "Teenage Mothers and Teenage Fathers: The Impact of Early Childbearing on the Parents' Personal and Professional Lives," *Family Planning Perspectives,* Vol. 10, 1978, pp. 199-205.

Chilman, Catherine S., *Adolescent Sexuality in a Changing American Society,* U.S. Department of Health, Education, and Welfare, Washington, D.C., 1979.

Coombs, J., and W. W. Cooley, "Dropouts: In High School and After High School," *American Educational Research Journal,* Vol. 5, 1968, pp. 343-364.

Coombs, L. C., and R. Freeman, "Pre-Marital Pregnancy, Childspacing, and Later Economic Achievement," *Population Studies,* Vol. 24, 1970, pp. 389-412.

Coombs, L. C., and Z. Zumeta, "Correlates of Marital Dissolution in a Prospective Fertility Study: A Research Note," *Social Problems,* Vol. 18, 1970, pp. 92-102.

Cramer, James C., "The Effects of Fertility on Husband's Economic Activity: Evidence from Static, Dynamic and Nonrecursive Models," in Julian L. Simon and Julie DaVanzo (eds.), *Research in Population Dynamics,* Vol. 2, JAI Press, Greenwich, Connecticut, 1979.

DeCharms, Richard, *Personal Causation: The Internal Affective Determinants of Behavior,* Academic Press, New York, 1968.

Douvan, Elizabeth, and Martin G. Gold, "Model Patterns in American Adolescence," in Lois W. Hoffman and Martin L. Hoffman (eds.), *Review of Child Development Research,* Russell Sage Foundation, New York, 1966.

Elder, Glenn H., and Richard Rockwell, "Marital Timing in Women's Life Patterns," *Journal of Family History,* Vol. 1, 1976, pp. 34-53.

Ewer, Phyllis A., and James O. Gibbs, "School Return Among Pregnant Adolescents," *Journal of Youth and Adolescence,* Vol. 5, 1976, pp. 221-229.

Furstenberg, Frank F., Jr., "The Social Consequences of Teenage Parenthood," *Family Planning Perspectives,* Vol. 8, 1976a, pp. 148-164.

Furstenberg, Frank F., Jr., *Unplanned Parenthood: The Social Consequences of Teenage Childbearing,* The Free Press, New York, 1976b.

Furstenberg, Frank F., Jr., and Albert G. Crawford, "Family Support: Helping Teenage Mothers to Cope," *Family Planning Perspectives,* Vol. 10, 1978, pp. 322-333.

Gispert, Maria, and Ruth Falk, "Sexual Experimentation and Pregnancy in Young Black Adolescents," *American Journal of Obstetrics and Gynecology,* Vol. 125, 1976, pp. 459-466.

Gordon, Chad, "Development of Evaluated Role Identities," *Annual Review of Sociology,* Vol. 2, 1976, pp. 405-433.

Gurin, Patricia, Gerald Gurin, Rosina C. Lao, and Muriel Beattie, "Internal-External Control in the Motivational Dynamics of Negro Youth," *Journal of Social Issues,* Vol. 25, 1969, pp. 29-53.

Haggstrom, Gus W., and Peter A. Morrison, *Consequences of Parenthood in Late Adolescence: Findings from the National Longitudinal Study of High School Seniors,* The Rand Corporation, N-1343-NICHD, December 1979.

Hofferth, Sandra L., and Kristin A. Moore, "Early Childbearing and Later Economic Well-Being," *American Sociological Review,* Vol. 44, 1979, pp. 784-815.

Hogan, Dennis P., "The Variable Order of Events in the Life Course," *American Sociological Review,* Vol. 43, 1978, pp. 573-586.

Huber, Joe, "Married Students vs. Married Dropouts," *Phi Delta Kappan,* Vol. 52, 1970, pp. 115-116.

Kanouse, David E., Gus W. Haggstrom, Thomas J. Blaschke, James P. Kahan, William Lisowski, and Peter A. Morrison, *Effects of Postsecondary Experiences on Aspirations, Attitudes, and Self-Conceptions,* The Rand Corporation, R-2616-HEW, April 1980.

Kipp, Marjorie, and S. A. Griggs, "Special Educational Centers for Unwed Pregnant Girls," *School Counselor,* Vol. 22, 1975, pp. 342-346.

Klatzky, Sheila R., and Robert W. Hodge, "A Canonical Correlation Analysis of Occupational Mobility," *Journal of the American Statistical Association,* Vol. 66, 1971, pp. 16-22.

Klemmack, David L., and John N. Edwards, "Women's Acquisitions of Stereotyped Occupational Aspirations," *Sociology and Social Research,* Vol. 41, 1973, pp. 510-525.

Levinsohn, Jay R., Louise B. Henderson, John A. Riccobono, and R. Paul Moore, *National Longitudinal Study: Base Year, First, Second, and Third Follow-up Data File Users Manual,* 2 vols., Research Triangle Institute, Research Triangle Park, North Carolina, 1978.

Lord, Frederic M., "A Paradox in the Interpretation of Group Comparisons," *Psychological Bulletin,* Vol. 68, 1967, pp. 304-305.

MacDonald, A. P., Jr., "Internal-External Locus of Control and the Practice of Birth Control," *Psychological Reports,* Vol. 27, 1970, p. 206.

Marini, Margaret Mooney, and Ellen Greenberger, "Sex Differences in Educational Aspirations and Expectations," *American Educational Research Journal,* Vol. 15, 1978, pp. 67-79.

Mason, Karen Oppenheim, and Larry L. Bumpass, "U.S. Women's Sex Role Ideology, 1970," *American Journal of Sociology,* Vol. 80, 1975, pp. 1212-1219.

McCall, George J., and J. L. Simmons, *Identities and Interactions,* rev. ed., The Free Press, New York, 1978.

Menken, Jane, "The Health and Demographic Consequences of Adolescent Pregnancy and Childbearing," paper presented at the Conference on Research on the Consequences of Adolescent Pregnancy and Childbearing, sponsored by the Center for Population Research, NICHD, and the Alan Guttmacher Institute, Washington, D.C., October 29-30, 1975.

Mincer, Jacob, *Schooling, Experience, and Earnings,* Columbia University Press, New York, 1974.

Moore, Kristin A., "Teenage Childbirth and Welfare Dependency," *Family Planning Perspectives,* Vol. 10, 1978, pp. 233-235.

Moore, Kristin A., and Sandra L. Hofferth, *The Consequences of Age at First Birth: Final Research Summary,* Working Paper 1146-07, The Urban Institute, Washington, D.C., 1978.

Moore, Kristin A., and Linda J. Waite, "Marital Dissolution, Early Motherhood, and Early Marriage," *Social Forces,* 1981 (forthcoming).

National Center for Education Statistics, *Group Profiles on Self-Esteem, Locus of Control, and Life Goals,* U.S. Department of Health, Education, and Welfare, Pub. No. NCES 77-260, Washington, D.C., 1977.

Presser, Harriet B., "The Timing of First Birth, Female Roles and Black Fertility," *Milbank Memorial Fund Quarterly,* Vol. 49, 1971, pp. 329-361.

Presser, Harriet B., "Social Consequences of Teenage Childbearing," in William Petersen and Lincoln Day (eds.), *Social Demography: The State of the Art,* Harvard University Press, Cambridge, 1977.

Rosenberg, Morris, *Society and the Adolescent Self-Image,* Princeton University Press, Princeton, New Jersey, 1965.

Rotter, Julian B., "Generalized Expectancies for Internal Versus External Control of Reinforcement," *Psychological Monographs,* Vol. 80 (1, Whole No. 609), 1966.

Searle, S. R., *Linear Models,* John Wiley and Sons, New York, 1971.

Sewell, William H., and Vimal P. Shah, "Parents' Education and Children's Educational Aspirations and Achievements," *American Sociological Review,* Vol. 33, 1968, pp. 191-209.

Sewell, William H., and Vimal P. Shah, "Socioeconomic Status, Intelligence, and the Attainment of Higher Education," *Sociology of Education,* Vol. 40, 1967, pp. 1-23.

Sitkin, Emily Malsin, "Measurement of Prospective Fantasy and Other Factors in Pregnant Black Teenage Girls," Ph.D. dissertation, Columbia University, 1972.

Spitze, Glenna D., "Role Experiences of Young Women: A Longitudinal Test of the Role Hiatus Hypothesis," *Journal of Marriage and the Family,* Vol. 40, 1978, pp. 471-479.

Stryker, Sheldon, "Identity Salience and Role Performance: The Relevance of Symbolic Interaction Theory for Family Research," *Journal of Marriage and the Family,* Vol. 30, 1968, pp. 558-564.

Timm, Neil H., *Multivariate Analysis with Applications in Education and Psychology,* Brooks/Cole Publishing, Monterey, California, 1975.

Trussell, James, "Economic Consequences of Teenage Childbearing," *Family Planning Perspectives,* Vol. 8, 1976, pp. 184-190.

Trussell, James, and Jane Menken, "Early Childbearing and Subsequent Fertility," *Family Planning Perspectives,* Vol. 10, 1978, pp. 209-222.

U.S. Bureau of the Census, *Current Population Reports,* Series P-20, No. 336, "Population Profiles of the United States," Government Printing Office,

Washington, D.C., 1979a.

U.S. Bureau of the Census, *Current Population Reports,* Series P-20, No. 341, "Fertility of American Women: June 1978," Government Printing Office, Washington, D.C., 1979b.

U.S. Bureau of the Census, *Current Population Reports,* Series P-20, No. 349, "Marital Status and Living Arrangements: March 1979," Government Printing Office, Washington, D.C., 1980.

U.S. Department of Labor, *Handbook of Labor Statistics 1978,* Bulletin 2000, Bureau of Labor Statistics, Government Printing Office, Washington, D.C., 1979.

Waite, Linda J., and Kristin A. Moore, "The Impact of an Early First Birth on Young Women's Educational Attainment," *Social Forces,* Vol. 56, 1978, pp. 845-865.

Wylie, Ruth, *The Self-Concept:* Vol. 2, *Theory and Research on Selected Topics,* rev. ed., University of Nebraska Press, Lincoln, 1979.

Zelnik, Melvin, and John F. Kantner, "Contraceptive Patterns and Premarital Pregnancy Among Women Aged 15-19 in 1976," *Family Planning Perspectives,* Vol. 10, 1978, pp. 135-142.